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U. S. DEPARTMENT OF AGRICULTURE.

BUREAU OF PLANT INDUSTRY—BULLETIN No. 5.

B. T. GALLOWAY, Chief of Bureau.

SEEDS AND PLANTS

IMPORTED THROUGH THE SECTION OF SEED AND PLANT INTRODUCTION FOR DISTRIBUTION IN COOPERATION WITH THE AGRICULTURAL EXPERIMENT STATIONS.

INVENTORY No. 9,
NUMBERS 4351-5500.

ISSUED JANUARY 18, 1902.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1902.

BUREAU OF PLANT INDUSTRY.

OFFICERS.

BEVERLY T. GALLOWAY, *Chief of Bureau.*

ALBERT F. WOODS, *Pathologist and Physiologist.*
FREDERICK V. COVILLE, *Botanist.*
F. LAMSON-SCRIBNER, *Agrostologist.*
G. B. BRACKETT, *Pomologist.*

SEED AND PLANT INTRODUCTION.

SCIENTIFIC STAFF.

ERNST A. BESSEY, *Assistant in Charge.*
DAVID G. FAIRCHILD, *Permanent Agricultural Explorer.*

U. S. DEPARTMENT OF AGRICULTURE.

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LETTER OF TRANSMITTAL.

U. S. Department of Agriculture,
Bureau of Plant Industry,
Office of the Chief,
Washington, D. C., September 10, 1901.

Sir: I have the honor to transmit herewith the manuscript of an inventory of seeds and plants imported for distribution in cooperation with the agricultural experiment stations. Many of these importations have proved to be of great value to the agricultural industries of the United States. Attention is called to the introductory statement (p. 5) for information regarding the distribution of the seeds and plants listed.

I recommend the publication of this manuscript as Bulletin No. 5 of the Bureau series.

Respectfully,

B. T. Galloway,
Chief of Bureau.

Hon. James Wilson,
Secretary of Agriculture.

INVENTORY OF FOREIGN SEEDS AND PLANTS.

INTRODUCTORY STATEMENT.

This inventory or catalogue of seeds and plants received during the spring and summer of 1900 represents the collections of the agricultural explorers of the Department of Agriculture in foreign countries, and also the receipts from various other sources. Included in the list are the seeds of a large number of native plants obtained for exchange with botanists and horticulturists abroad, it being possible to secure in this manner many valuable seeds and plants not for sale by dealers.

An effort has been made to verify every name, but in many cases the only sources of information have been the persons from whom the seeds or plants were obtained, while in some cases only colloquial names were obtainable. It is probable, therefore, that some of the names will be found to be incorrect.

The publication of this list has been so long delayed that many of the numbers are already entirely exhausted, as indicated by the word "Distributed," and many others will probably be distributed before this inventory reaches the experimenters.

The supply of seeds and plants at the disposal of this office is in most cases quite limited, inasmuch as the importations are made for experimental purposes and not for general distribution, it being unwise to make the latter until the value of the plants distributed is known. Distribution of the plants here catalogued will be confined almost entirely to the agricultural experiment stations and to persons known to be careful and reliable experimenters. It must not be expected that all or even the greater part of the importations will prove valuable. However, it is important that records not only of successes but of failures be obtained in order that future work may be more successful.

It is especially desirable that all persons receiving seeds or plants should retain the original numbers marked on the packages, as all the reports or other information will be filed under these numbers, and in this way be easy of access.

Ernst A. Bessey,
Assistant in Charge of Seed and Plant Introduction.

INVENTORY.

4351. VICIA FABA. **Broad bean.**

From Naples, Italy. Received February 5, 1900.

Aguadulce, improved. A fine bean with pods 2 inches wide and 14 to 16 inches long, but few-seeded and with only three or four well-grown pods on each plant.

4352. VICIA FABA. **Broad bean.**

From Naples, Italy. Received February 5, 1900.

Sevilla Long Pod. "Stem quadrangular, erect, 2 to 2½ feet high, not very stout, green or slightly tinged with red; foliage light green; flowers one or two to four in each cluster. The standard is greenish white, longer than broad, and remains folded in the center even when the flower is in full bloom. The first cluster of flowers usually appears in the axil of the seventh leaf from the base of the stem. The pods are about one-half inch wide and 8 to 12 inches long, solitary or in pairs, and soon become pendent by their weight. An early variety, but not very hardy." (*Vilmorin.*)

4353. VICIA FABA. **Broad bean.**

From Naples, Italy. Received February 5, 1900.

Sicilian. A purple-seeded variety, smaller and less productive than the field bean.

4354. VICIA FABA. **Broad bean.**

From Naples, Italy. Received February 5, 1900.

Neapolitan.

4355. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received February 5, 1900.

Purple Navidad. Early, dark purple.

4356. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received February 5, 1900.

Santa Teresa. "Early, purple, changing to green when cooked." (*Dammann.*)

4357. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples Italy. Received February 5, 1900.

White San Isidor.

4358. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received February 5, 1900.

San Martinari. A purplish variety, which ripens in Italy in November.

4359. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received February 5, 1900.

Gennarese. A purplish variety, maturing in Italy in January.

4360. CICHORIUM INTYBUS. **Chicory.**

From Naples, Italy. Received February 5, 1900.

Asparagus. A variety which produces rosettes of much-thickened leaves. These are cooked and served cold, and are said to be delicious in salads.

4361. BETA VULGARIS. **Chard.**

From Naples, Italy. Received February 5, 1900.

Swiss Silver-ribbed. "A fine sort, with large, wide leaves, which are very wavy, half-erect, and remarkable for the size of their stalks and midribs, which are often 4 inches or more in width. Quite productive and of very good quality, with a delicate, slightly acidulous flavor. The leaves may also be used for greens, the lighter-colored ones being the best for this purpose. Chards sown in early spring commence to mature their stalks in July and continue well into the winter." (*Vilmorin.*) Distributed.

4362. BETA VULGARIS. **Chard.**

From Naples, Italy. Received February 5, 1900.

Curled Silver-ribbed. Almost as prolific as No. 4361, with leaves equally white but remarkably crimped and curled. The leafstalks are narrower, but of quite as good quality.

4363. BETA VULGARIS. **Chard.**

From Naples, Italy. Received February 5, 1900.

Chilian Scarlet. A very large kind, with long, stiff, almost erect leafstalks 2 or 3 inches wide. Leaves rather large, 2 to 2½ feet long, wavy, almost curled, dark green, with a metallic luster. The leafstalks are bright red. Often grown as an ornamental plant.

4364. BETA VULGARIS. **Chard.**

From Naples, Italy. Received February 5, 1901.

Chilian Yellow. A very large kind, with long, stiff, almost erect leafstalks 2 or 3 inches wide. Leaves rather large, 2 to 2½ feet long, wavy, almost curled, dark green, with a metallic luster. The leafstalks are a deep yellow. Often used as an ornamental plant.

4365. CUCURBITA PEPO. **Vegetable marrow.**

From Naples, Italy. Received February 5, 1900.

4366. CUCURBITA PEPO. **Vegetable marrow.**

From Naples, Italy. Received February 5, 1900.

White Cocozella of Tripoli.

4367. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 5, 1900.

Largest of Sicily. A new Italian variety.

4368. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 5, 1900.

Prince Bismarck. Remarkable for the very much thickened leafstalks.

4369. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 5, 1900.

Morosini. A variety originated by Dammann in 1896. The sweetest, best, and most tender variety known. In three months from the seed it forms very large, golden yellow stalks and bright green, finely divided leaves. An excellent market-gardener's variety.

4370. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 5, 1900.

Bolognese.

4371. BOEHMERIA NIVEA. **Ramie.**

From Naples, Italy. Received February 5, 1900.

A perennial, native of eastern Asia, long grown in China and India. A fiber known as *China grass* is manufactured from the stems. Ramie requires a hot, moist climate, without extremes of temperature, and a rich, moist soil, so that growth shall be rapid and continuous during the season. The plant is propagated by seeds, cuttings, layers, and division of the roots. The seeds, when used, should be started in hotbeds and the beds shaded until the plants are 2 to 6 inches high, when they may be transplanted to the fields. The best method of propagation is by dividing the roots. The plant is ready for harvest when the seeds commence to ripen.

4372. CERATONIA SILIQUA. **Carob.**

From Naples, Italy. Received February 5, 1900.

St. John's Bread, or Algaroba. (See No. 3112, Inventory No. 7.)

4373. HOVENIA DULCIS. **Raisin tree.**

From Naples, Italy. Received February 5, 1900.

(See Nos. 3028 and 3310, Inventory No. 7.)

4374. NICOTIANA TABACUM. **Tobacco.**

From Naples, Italy. Received February 5, 1900.

Hungarian Debroë.

4375. NICOTIANA TABACUM. **Tobacco.**

From Naples, Italy. Received February 5, 1900.

Hungarian Czetneck.

4376. NICOTIANA TABACUM. **Tobacco.**

From Naples, Italy. Received February 5, 1900.

Hungarian Szegedin.

4377. VIGNA CATJANG. **Cowpea.**

From Naples, Italy. Received February 5, 1900, under the name of *Dolichos sphorospermus.*

4378. PACHYRHIZOS TUBEROSUS. **Yam-bean.**

From Naples, Italy. Received February 5, 1900.

"The yam-bean or ahipa is a native of Venezuela and other parts of South America up to elevated country. It climbs to a height of 20 feet and bears pods much larger than those of *P. angulatus*, which in a young state are used like French beans. When boiled they are tender and sweetish, but deleterious when raw. They are free from fibrous strings at the edge. Seeds variable in color. The tubers of three plants may fill a bushel basket. They mature in a few months. These edible tubers may attain a weight of 60 pounds." (*Von Mueller.*)

4379. VIGNA CATJANG. **Cowpea.**

From Naples, Italy. Received February 5, 1900, under the name of *Dolichos lubia.*

4380. DOLICHOS LABLAB. **Madagascar bean.**

From Naples, Italy. Received February 5, 1900.

4381. VIGNA CATJANG. **Cowpea.**

From Naples, Italy. Received February 5, 1900, under the name of *Dolichos bahiensis.*

4382. VIGNA CATJANG. **Cowpea.**

From Naples, Italy. Received February 5, 1900, under the name of *Dolichos bicontortus.*

4383. DOLICHOS ATROPURPUREUS.

From Naples, Italy. Received February 5, 1900.

4384. DOLICHOS SEMPERVIRENS.

From Naples, Italy. Received February 5, 1900.

4385. PHASEOLUS CARACALLA.

From Naples, Italy. Received February 5, 1900.

4386. PANICUM TEXANUM. **Colorado grass.**

From Fort Worth, Tex. Received February 5, 1900.

(This seed was destroyed because of its low germination.)

4387. ZEA MAYS. **Corn.**

From Texas. Received February 7, 1900.

Mexican June. This variety is much used in Mexico and southern Texas for late planting. In the southern half of the Gulf States it can be successfully grown after a crop of oats, millet, or wheat has been harvested. It is a white corn and the ears are of a good size, each stalk producing from one to three ears. The stalks attain a height of from 10 to 15 feet. The blades are more numerous than on most other varieties, making this valuable for forage or ensilage purposes. It is often planted between rows of Irish potatoes and other truck, and is suitable for rich bottom lands that become dry enough to plant early in June.

4388. MIMUSOPS BALATA. **Balata.**

From Georgetown, British Guiana. Received February 7, 1900, from John Guillat.

This tree is the source of the balata gum of commerce, a substance closely resembling guttapercha, and substituted for it in many manufactures. It is a native of tropical South America. Distributed.

4389. CUCUMIS MELO. **Winter muskmelon.**

From California. Received February 8, 1900. Presented by Ira W. Adams, of Calistoga, Cal.

"The seed of this valuable melon was procured by Dr. J. D. B. Stillman, at Smyrna, in 1879. It came from the city of Cassaba, in Asia Minor, a city celebrated for the fine quality of its melons. I found them to be the sweetest, spiciest, and most delicious melons I ever ate. I could compare them to nothing else I ever ate in the fruit line, unless it was to a ripe, luscious pineapple. I kept one of these melons through the winter of 1885, until April 3; it was then fully ripe and very delicious. They should be planted the same as other muskmelons and picked after the frost has killed the vines or nipped them pretty badly. Light frosts do not harm them in the least. Cut off the stem quite close to the melon and handle carefully, putting them in the coolest and dryest place you have. If stored in a warm room they ripen very rapidly, and will be gone before the winter fairly sets in. This melon, unlike any other I have ever seen, when cut from the vine is very hard, especially two-thirds of it from the stem end, and quite rough and deeply corrugated, deflecting, however, very much from a straight line. The rind is of a grayish-green color, and can scarcely be indented with the thumb nail. The flesh is a creamy green and

very thick and firm. When fully ripe most of them turn a little yellow, some quite yellow, and a spot on the blossom end about the size of a half dollar will be found quite mellow on pressing it. This is an infallible test, and you may be sure the melon is fit to eat, notwithstanding it may still look green, and most of the rind may yet remain very hard. They are excellent feed for milch cows, calves, horses, and poultry. The average weight for salable melons is from 6 to 10 pounds, although I have raised a great many that weighed 12 to 15 pounds each, and one that weighed 19½ pounds. I have had these melons in my yard entirely exposed to the weather when the temperature was down to 32° and 30° above zero, without being harmed in the least. I plant the seeds of this melon here from the 1st to the 10th of May, in hills 6 feet apart each way, leaving finally two plants in a hill. I cultivate them thoroughly, once a week both ways, until the vines interfere." (*Adams.*) Distributed.

4390. ZEA MAYS. **Corn.**

From Tennessee. Received February 8, 1900.

Wellborn's Conscience. Seed destroyed.

4391. AVENA SATIVA. **Oat.**

From North Dakota. Received February 1, 1900.

White Russian. This is a very hardy oat, prolific and of excellent quality. It is admirably adapted for cultivation in the coldest latitudes of this country, having originated in a similar climate. It is about the most resistant to crown rust of all northern-grown varieties. Should be sown very early—as soon as the opening of spring will permit.

4392. TRITICUM COMPACTUM. **Wheat.**

From Idaho. Received February, 1900.

Little Club. This variety is one of the club group of wheats, and is commonly grown in Washington, Idaho, and Oregon. It may be sown in autumn or spring. The plant is short, with short but very compact, beardless heads, well filled. The grain is white, soft and starchy, rounded, and pointed, somewhat similar in shape to barley grains. It is adapted admirably to all Northwestern mountain States, but might also be tried in the more southern States if sown in October.

4393. ZEA MAYS. **Corn.**

From South Carolina. Received February, 1900.

Garick's Prolific. A white field corn with medium ears. Stalks stout, leafy, bearing two to five ears, which finally become pendent. An excellent variety for the South.

4394. MEDICAGO SATIVA. **Alfalfa.**

From northern Utah. Received February 8, 1900. Distributed.

4395. MEDICAGO SATIVA. **Alfalfa.**

From southern Utah. Received February 8, 1900. Distributed.

4396. PHLEUM PRATENSE. **Timothy.**

From Utah. Received February 8, 1900.

4397. LANDOLPHIA HENDELOTII.

From France. Received February 10, 1900.

The *Landolphias* are African rubber plants. They are lianes or vines. Recent experiments indicate that all of the caoutchouc in the plant may be extracted by mechanical means, the stems being first dried and then macerated in warm water. Distributed.

4398. LANDOLPHIA KLEINII.

From France. Received February 10, 1900.

(See No. 4397.) Distributed.

4399. FICUS ELASTICA. **Assam rubber.**

From France. Received February 14, 1900.

"Assam rubber comes mostly from *Ficus elastica*. A little of it is derived from *Urostigma laccifera*. *Ficus elastica* grows in the hot mountain valleys of the Himalayas, between 70° and 80° east longitude, where the air remains warm and damp and the mercury stands at 38° C. in the shade." (*Semmler.*) Distributed.

4400. FICUS RELIGIOSA. **Fig of Scripture.**

From France. Received February 14, 1900.

Somewhat similar to No. 4399 in that it is the source of a commercial rubber in the East Indies. Distributed.

4401. PITHECOLOBIUM SAMAN. **Rain tree.**

From France. Received February 14, 1900.

Inga Saman. The pods of this West Indian tree are useful for forage, resembling those of the mesquite bean. The tree has been recommended as a nurse tree in banana or coffee plantations. (See No. 2724, Inventory No. 7.)

4402. BETA VULGARIS. **Sugar beet.**

From Germany. Presented by Mr. Ad. Strandes, of Rittergut, Zehringen bei Cöthen. Received February 15, 1900.

Zehringen Elite, from polarized mother beets. Distributed.

4403. ZEA MAYS. **Sugar corn.**

From New York. Received February 14, 1900.

Stowell's Evergreen.

4404. TRITICUM VULGARE. **Wheat.**

From Minnesota. Received February 16, 1900.

Wellman's Fife. An improved strain of the "Saskatchewan" and further improved through rigid seed selection by Mr. D. L. Wellman, of Frazee City, Minn. Claimed to be particularly hardy, productive, and rust-resistant. A bald variety with medium-sized hard, red grains. Should be sown as early in the spring as the weather will permit. Adapted to all Northern spring-wheat districts.

4405. ANDROPOGON SORGHUM. **Sorghum.**

From Missouri. Received February 15, 1900. Presented by Mr. W. P. Griffin, of Altamont.

An improved variety, originated by Mr. Griffin. It is better adapted for sirup than the Amber cane, because the juice does not granulate so readily. The cane is stout, erect, firmly rooted. It matures in 12 to 14 weeks, and is a heavy yielder both of juice and seed.

4406. AVENA SATIVA. **Oat.**

From Texas. Received February 13, 1900.

Texas Rust-proof. This prolific variety of red oat is very popular in Texas and other portions of the Southern States, particularly because of its rust-resisting qualities, as the oat crop in that region is often ruined by rust if ordinary varieties are sown. It should be sown in the fall or early in the spring. It is one of the best varieties for the South.

4407. AVENA SATIVA. **Oat.**

From Rock West, Ala. Received February 15, 1900.

Ninety Day. An early-maturing oat. Presented by Mr. W. P. Murphy.

4408. TRIFOLIUM ALPINUM. **Clover.**

From Grenoble, France. Received February 15, 1900.

This clover was one of the most promising sorts grown in the Alpine grass garden at Grenoble.

4409–4413. LAGENARIA VULGARIS. **Gourd.**

From Naples, Italy. Received February 19, 1900.

A collection of ornamental gourds useful for trellis work:

4409. LAGENARIA VULGARIS DEPRESSA.

4410. LAGENARIA VULGARIS MAXIMA.

4411. LAGENARIA VULGARIS LONGISSIMA.

4412. LAGENARIA VULGARIS.

4413. LAGENARIA VULGARIS, *Pulverhorn.*

4414. CAPRIOLA DACTYLON. **Bermuda grass.**

From Australia. Received February 18, 1900.

4415. PINUS. **Pine.**

From Syria. Presented by Mr. W. Michael, of Congo, Ky. Received February 24, 1900.

A pine from the slopes of Mount Lebanon.

4416. BETA VULGARIS. **Sugar beet.**

From Proskurow, Russia. Received through Dr. Mrozinski, February 27, 1900.

Kleinwanzlebener (*Mrozinski, No. 2, Russia*). Seed from beets grown on clayey black prairie soil. (See No. 3941, Inventory No. 8.) Distributed.

4417. BROMUS INERMIS. **Smooth brome grass.**

From Portland, Oreg. Received March, 1900.

Oregon-grown seed. (See No. 2964, Inventory No. 7.) Distributed.

4418. BROMUS INERMIS. **Smooth brome grass.**

From Portland, Oreg. Received February 28, 1900.

Seed grown in the vicinity of Spokane, Wash. (See No. 2964, Inventory No. 7.) Distributed.

4419. BROMUS INERMIS. **Smooth brome grass.**

From Toronto, Canada. Received February 28, 1900.

Seed grown in Assiniboia, Northwest Territory, Canada. (See No. 2964, Inventory No. 7.) Distributed.

4420. BROMUS INERMIS. **Smooth brome grass.**

From Manitoba. Received March, 1900.

Seed grown in Manitoba, Canada. (See No. 2964, Inventory No. 7.) Distributed.

4421. NICOTIANA TABACUM. **Tobacco.**

From Naples, Italy. Received February 26, 1900.

Sumatra.

4422. NICOTIANA TABACUM. **Tobacco**

From Naples, Italy. Received February 26, 1900.

Brazilian.

4423. COVILLEA DIVARICATA. **Greasewood.**

From Tucson, Ariz. Received through Mr. W. T. Swingle, December, 1899.

4424. PROSOPIS VELUTINA? **Mesquite.**

From Tucson, Ariz. Received through Mr. W. T. Swingle, November, 1899.

4425. PROSOPIS VELUTINA? **Mesquite.**

From Tuscon, Ariz. Received through Mr. W. T. Swingle, November, 1899.

4426. VITIS ARIZONICA.

From Tucson, Ariz. Received through Mr. W. T. Swingle, December, 1899.

4427. ZIZYPHUS LYCIOIDES.

From Arizona. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4428.

From Benson, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4429. LYCIUM ERICOIDES.

From Benson, Ariz. Received through Mr. W. T. Swingle, December, 1899.

4430. ECHINOCACTUS WISLIZENI. **Visnaga.**

From Benson, Ariz. Received through Mr. W. T. Swingle, December, 1899.

4431. SESBANIA MACROCARPA.

From Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899.

4432. ATRIPLEX CANESCENS.

From Yuma, Ariz. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4433. PARKINSONIA TORREYANA. **Palo verde.**

From Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4434. HOLACANTHA EMORYI.

From Maricopa, Ariz. Received through Mr. W. T. Swingle, December, 1899.

4435. PROSOPIS JULIFLORA? **Mesquite.**

From Tempe, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4436. PROSOPIS PUBESCENS? **Mesquite.**

From California, near Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899.

4437. ATRIPLEX LENTIFORMIS.

From California, near Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899.

4438. ASCLEPIAS SUBULATA.

From California. Received through Mr. W. T. Swingle, November, 1899.

4439. ATRIPLEX LENTIFORMIS.

From California, near Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4440. CUCUMIS MELO. **Muskmelon.**

From Applegate, Cal. Presented by Col. John P. Irish, through Mr. W. T. Swingle, October, 1899.

4441. MEDICAGO LUPULINA.

From Applegate, Cal. Received through Mr. W. T. Swingle, October, 1899.

4442. TRICHOSTEMA LANCEOLATUM.

From Applegate, Cal. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4443. LOTUS SERICEUS.

From Applegate, Cal. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4444. LUPINUS ARBOREUS.

From San Francisco, Cal. Received through Mr. W. T. Swingle, November, 1899.

4445. LINUM GRANDIFLORUM.

From Berkeley, Cal. Received through Mr. W. T. Swingle, October, 1899.

4446. LUPINUS DENSIFLORUS.

From Hornbrook, Cal. Received through Mr. W. T. Swingle, October, 1899.

4447. YUCCA WHIPPLEI.

From Los Angeles, Cal. Received through Mr. W. T. Swingle, November, 1899.

4448. SCHINUS MOLLE. **Pepper tree.**

From California. Received through Mr. W. T. Swingle, October, 1899.

4449. VITIS CALIFORNICA.

From Sacramento, Cal. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4450. ROBINIA NEO-MEXICANA.

From California. Received through Mr. W. T. Swingle, October, 1899.

4451. FOUQUIERIA SPLENDENS. **Ocatillo.**

From California, opposite Yuma, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4452. PLATANUS RACEMOSA.

From Santa Barbara, Cal. Received through Mr. W. T. Swingle, November, 1899.

4453. PHASEOLUS VULGARIS. **Bean.**

From Applegate, Cal. Presented by Col. John P. Irish, through Mr. W. T. Swingle, October, 1899. Distributed.

Frijole Romana.

4454. GILIA AGGREGATA.

From Spokane Falls, Wash. Received through Mr. W. T. Swingle, September, 1899. Distributed.

4455. BROMUS PORTERI.

From Pullman, Wash. Received through Mr. W. T. Swingle, September, 1899. Distributed.

4456. RUMEX HYMENOSEPALUS. **Canaigre.**

From Tempe, Ariz. Received through Mr. W. T. Swingle, November, 1899. Distributed.

4457. GAULTHERIA SHALLON.

From Seattle, Wash. Received through Mr. W. T. Swingle, October, 1899.

4458. MAMMILLARIA GRAHAMI.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4459. CRATÆGUS.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4460. VALLESIA GLABRA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1889.

4461. PERITYLE LEPTOGLOSSA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4462. MARTYNIA FRAGRANS.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4463. STEGNOSPERMA HALIMIFOLIA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4464. ASCLEPIAS SUBULATA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4465. PARKINSONIA ACULEATA. **Vagote.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4466. NISSOLIA SCHOTTII.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4467. COUTAREA LATIFOLIA.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4468. ACACIA FILICULOIDES.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4469. PARKINSONIA. **Palo verde.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4470. FOUQUIERIA. **Ocatillo.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4471. CÆSALPINIA GRACILIS.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4472. CEREUS THURBERI. **Pitahaya.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4473. CEREUS PECTEN-ABORIGINUM.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4474. GOSSYPIUM BARBADENSE. **Sea-island cotton.**

From James Island, South Carolina. Received February 28, 1900, through the Division of Vegetable Physiology and Pathology. Presented by Mr. F. P. Seabrook.

This is one of the best varieties of sea-island cotton.

4475. DAHLIA VARIABILIS. **Dahlia.**

From Naples, Italy. Received through Wulle & Co., February 28, 1900.

Dahlia excelsior fantasia. Distributed.

4476. DAHLIA VARIABILIS. **Dahlia.**

From Naples, Italy. Received through Wulle & Co., February 28, 1900.

Dahlia variabilis Imperialis.

4477. HELIOTROPIUM INCANUM. **Heliotrope.**

From Naples, Italy. Received through Wulle & Co., February 28, 1900.

Non plus ultra. Distributed.

4478. TORENIA FOURNIERI. **Torenia.**

From Naples, Italy. Received through Wulle & Co., February 28, 1900.

Princess Helena of Montenegro. Torenia with giant flowers. Distributed.

4479. TORENIA FOURNIERI. **Torenia.**

From Naples, Italy. Presented by Wulle & Co., February 28, 1900.

The Bride. Distributed.

4480. IPOMŒA COLLATA.

From Naples, Italy. Received February 28, 1900.

Ipomoe collata cinerea. A very delicately colored new hybrid with corolla irregular like the Japanese sorts.

4481. IPOMŒA LEARI.

From Naples, Italy. Received February 28, 1900.

Ipomœa leari perenne splendida. A remarkably rapid grower; very showy.

4482. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received through Wulle & Co., February 28, 1900.

Early Violet. Ripens in January. A spring and summer vegetable, like cauliflower, but with green heads.

4483. BRASSICA OLERACEA BOTRYTIS. **Broccoli.**

From Naples, Italy. Received February 28, 1900.

Febralino. Ripens in February. A spring and summer vegetable, like cauliflower, but with green heads.

4484. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 28, 1900.

Doux de Boulogne. An excellent vegetable, which deserves trial by American gardeners.

4485. FŒNICULUM DULCE. **Sweet fennel.**

From Naples, Italy. Received February 28, 1900.

Doux de Messina. (See No. 4484.)

4486. LACTUCA SATIVA. **Lettuce.**

From Naples, Italy. Received February 28, 1900.

Scarlet Genezzano. "A black-seeded variety; head very hard, brown, but yellow inside. It lasts a long time and withstands the highest temperatures and drought. Worthy of trial in all arid and semiarid regions." (*Fairchild.*)

4487. ALLIUM CEPA. **Onion.**

From Naples, Italy. Received February 28, 1900.

Tripoli Barletta Wonder. A small, very early white variety.

4488. ALLIUM CEPA. **Onion.**

From Naples, Italy. Received February 28, 1900.

Silver-white Nocera.

4489. ALLIUM CEPA. **Onion.**

From Naples, Italy. Received February 28, 1900.

Giant Rocca. Blood red.

4490. ALLIUM CEPA. **Onion.**

From Naples, Italy. Received February 28, 1900.

Bassano. Dark red.

4491. LYCOPERSICUM ESCULENTUM. **Tomato.**

From Naples, Italy. Received February 28, 1900.

Prince Bismarck. "A larger fruit than the *Peach* tomato, with yellow skin. A seedling from the *Peach*, but differing from it in color." (*Fairchild.*)

4492–4498. LAGENARIA VULGARIS. **Gourd.**

From Naples, Italy. Received February 28, 1900.

A collection of the so-called *Zuccini*. The immature fruits are cooked like vegetable marrow or summer squash. These are worthy a trial. They are as follows:

4492. CLAVATA. A club-shaped gourd.

4493. DEPRESSA.

4494. CANTEEN.

4495. BOTTLE.

4496. MINIMA. Dwarf.

4497. POWDERHORN.

4498. MIXED.

4499. LUPINUS ARBOREUS.

From Berkeley, Cal. Received through Mr. W. T. Swingle, January, 1900. Distributed.

4500. FOUQUIERIA SPINOSA? **Ocatillo.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December 16, 1899.

4501. RANDIA THURBERI.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4502. ACACIA?

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4503. ANTIGONON LEPTOPUS.

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4504. BURSERA MICROPHYLLA. **Torrote blanco.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4505. CEREUS PECTEN-ABORIGINUM?

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4506. Parkinsonia. **Palo verde.**

From Moreno, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4507. Hiræa septentrionalis. **Gallinito.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4508. Calophanes peninsularis.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4509. Hæmatoxylon boreale.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4510. Pithecolobium sonoræ.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899)

4511. Poinciana regia. **Árbol de fuego.**

From Guaymas, Mexico. Presented by Señor Bustamante, through Mr. W. T. Swingle, December, 1899.

4512. Ficus fasciculata.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4513. Loranthus.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4514. Echinocactus.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899

4515. Bebbia juncea.

From Guaymas, Mexico. Received through W. T. Swingle, December, 1899.

4516. Diospyros. **Guayparin.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4517. Parkinsonia aculeata. **Vagote.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4518. Nicotiana glauca.

From San Juan, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4519. Bursera microphylla.

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4520. Crescentia alata. **Ayal.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4521. PITHECOLOBIUM DULCE. **Guaymochil.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4522. CARTHAMUS TINCTORIUS. **Safflower.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4523. ABRUS PRECATORIUS.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4524. QUERCUS EMORYI.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4525. MARTYNIA PROBOSCIDEA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4526. CAPSICUM ANNUUM. **Red pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

Chipotle.

4527. CAPSICUM ANNUUM. **Red pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

Chile ancho.

4528. CAPSICUM. **Red pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

Chile pasilla or *C. piasia?*

4529. CAPSICUM FRUTESCENS BACCATUM. **Bird pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

Chiltipines.

4530. CAPSICUM ANNUUM. **Red pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

Chile colorado.

4531. CAPSICUM ANNUUM. **Red pepper.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

Chile costeño.

4532. SIMMONDSIA CALIFORNICA. **Jojoba.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4533. PITHECOLOBIUM DULCE. **Guaymochil.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4534. SALVIA COLUMBARIÆ. **Chia.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle.

4535.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4536. PINUS EDULIS? **Piñon.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4537. OLNEYA TESOTA.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

4538. TAMARINDUS INDICA. **Tamarind.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4539. CEREUS SCHOTTII.

From Tucson, Ariz. Presented by Prof. J. W. Toumey, through Mr. W. T. Swingle, December, 1899. Distributed.

4540. ACACIA LONGIFOLIA.

From Oakland, Cal. Received through Mr. W. T. Swingle, December, 1899.

4541. ZIZYPHUS? **Chinese date.**

From San Francisco, Cal. Received through Mr. W. T. Swingle, October, 1899.

4542. SYMPHORICARPOS RACEMOSUS. **Snowberry.**

From Pullman, Wash. Received through Mr. W. T. Swingle, September, 1899. Distributed.

4543. RIBES DIVARICATUM?

From Seattle, Wash. Received through Mr. W. T. Swingle, October, 1899.

4544. HUMULUS LUPULUS. **Hop.**

From Puyallup, Wash. Received through Mr. W. T. Swingle, October, 1899. Distributed.

Cluster Hop.

4545. BROMUS VULGARIS EXIMIUS.

From Seattle, Wash. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4546. CHAMÆNERION ANGUSTIFOLIUM. **Fireweed.**

From Madroña Park, Seattle, Wash. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4547. ANAPHALIS MARGARITACEA. **Everlasting.**

From Seattle, Wash. Received through Mr. W. T. Swingle, October, 1899. Distributed.

4548. **"Lo han qua."**

From San Francisco, Cal. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4549. CEPHALANTHUS OCCIDENTALIS. **Button-bush.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4550. PANICUM VIRGATUM.

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4551. POLYGONUM DUMETORUM SCANDENS.

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4552. AMORPHA FRUTICOSA. **False indigo.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4553. HUMULUS LUPULUS. **Wild hop.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4554. LIATRIS PUNCTATA. **Blazing-star.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4555. CELTIS OCCIDENTALIS. **Hackberry.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4556. CELTIS OCCIDENTALIS. **Hackberry.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4557. PLATANUS OCCIDENTALIS. **Plane tree.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4558. RHUS GLABRA. **Sumac.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4559. CERCIS CANADENSIS. **Red bud.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4560. CERCIS CANADENSIS. **Red bud.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4561. RHUS GLABRA. **Sumac.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4562. GLEDITSIA TRIACANTHOS. **Honey locust.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. From a nearly thornless tree. Distributed.

4563. GLEDITSIA TRIACANTHOS. **Honey locust.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. From an entirely thornless tree. Distributed.

4564. GLEDITSIA TRIACANTHOS. **Honey locust.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. From a thorny tree. Distributed.

4565. CUCURBITA PEPO. **Vegetable marrow.**

From Westfield, Mass. Received through Mr. H. L. Loomis, March 1, 1900. Originally from Honolulu. Distributed.

4566. ERIOBOTRYA JAPONICA. **Loquat.**

From Sicily. Received through Messrs. Lathrop and Fairchild, March 5, 1900.

Palermo. A new variety originated by Dr. C. Sprenger, Vomero, Naples, Italy. Distributed.

4567. ERIOBOTRYA JAPONICA. **Loquat.**

From Sicily. Received through Messrs. Lathrop and Fairchild, March 5, 1900.

Limoncella. A new strain originated by Dr. C. Sprenger, Vomero, Naples, Italy. Distributed.

4568. ZEA MAYS. **Corn.**

From Kansas. Received March 6, 1900.

A yellow dent.

4569. ZEA MAYS. **Corn.**

From Kansas. Received March 6, 1900.

Roseland White.

4570. OPUNTIA FICUS-INDICA INERMIS. **Spineless cactus.**

From France. Received March 6, 1900.

This spineless pear cactus is extensively grown in Algeria for forage.

4571. PANICUM MILIACEUM. **Broom-corn millet.**

From Smrzicich, Moravia. Received from Frant. Vodicka, March 6, 1900.

This millet is one of the most important crops in many parts of Moravia.

4572. HORDEUM DISTICHUM NUTANS. **Barley.**

From Smrzicich, Moravia. Received from Frant. Vodicka, March 6, 1900.

Hanna. "A famous variety of barley for malting purposes. It is grown in the valley of the river Hanna, the richest part of Moravia." (*Dongres.*)

4573. PLATANUS OCCIDENTALIS. **Plane tree.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4574. GYMNOCLADUS CANADENSIS. **Kentucky coffee tree.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4575. GYMNOCLADUS CANADENSIS. **Kentucky coffee tree.**

From Manhattan, Kans. Received through Mr. W. T. Swingle, December, 1899.

4576. SCHRANKIA UNCINATA. **Sensitive briar.**

From Barton County, Kans. Presented by Mr. Albert Dickens, Kansas Agricultural Experiment Station. Received through Mr. W. T. Swingle, February, 1900.

4577. SPOROBOLUS AIROIDES. **Sacaton grass.**

From Benson, Ariz. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4578. SAPINDUS ACUMINATUS.

From Columbia, Tex. Received through Mr. B. F. Bush, February, 1900

Very handsome in cultivation.

4579. DODECATHEON MEADII.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4580. ECHINACEA ANGUSTIFOLIA.

From Lees Summit, Mo. Received through Mr. B. F. Bush, February, 1900.

4581. RHAMNUS LANCEOLATUS.

From Independence, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4582. RHUS AROMATICA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900.

4583. ECHINACEA PURPUREA.

From Monteer, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4584. AGAVE VIRGINICA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4585. CRATÆGUS VIRIDIS.

From Columbia, Tex. Received through Mr. B. F. Bush, February, 1900.

4586. SMILAX ROTUNDIFOLIA.

From Columbia, Tex. Received through Mr. B. F. Bush, February, 1900. Distributed.

4587. BUMELIA LYCIOIDES.

From Columbia, Tex. Received through Mr. B. F. Bush, February, 1900.

4588. CISSUS STANS.

From Columbia, Tex. Received through Mr. B. F. Bush, February, 1900. Distributed.

4589. BERCHEMIA SCANDENS.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4590. CRATÆGUS POPULIFOLIA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900.

4591. CRATÆGUS ROTUNDIFOLIA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900.

4592. CRATÆGUS COLLINA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900.

4593. CRATÆGUS SACCHARINA.

From Swan, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4594. ILEX DECIDUA. **Deciduous holly.**

From Pleasant Grove, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4595. VIBURNUM RUFOTOMENTOSUM.

From Chadwick, Mo. Received through Mr. B. F. Bush, February, 1900. Distributed.

4596. GLEDITSIA.

From Brazoria, Tex. Received through Mr. B. F. Bush, February, 1900. Distributed.

4597. CRATÆGUS MOLLIS.

From Courtney, Mo. Received through Mr. B. F. Bush, February, 1900.

4598. SMILAX HISPIDA.

From Courtney, Mo. Received through Mr. B. F. Bush, February, 1900.

4599. SYMPHORICARPOS VULGARIS.

From Kansas. Presented by Mr. Leon Swingle, through Mr. W. T. Swingle, February, 1900.

4600. LOTUS SERICEUS. **Dakota vetch.**

From South Dakota. Received through Mr. A. J. Pieters, February, 1900. Collected by Mr. L. P. Reinoehl.

4601. ECHINOPS SPHÆROCEPHALUS. **Chapman's honey plant**

From Berkeley, Cal. Presented by Prof. J. Burtt Davy, December, 1899. Distributed.

4602. MAMMILLARIA GRAHAMI.

From Washington, D. C. Received through Mr. W. T. Swingle, February, 1900. Distributed.

4603. MAMMILLARIA GRAHAMI.

From Washington, D. C. Received through Mr. W. T. Swingle, February, 1900. Distributed.

4604. LOPHOPHORA.

From Washington, D. C. Received through Mr. W. T. Swingle, February, 1900. Distributed.

4605. LOPHOPHORA.

From Washington, D. C. Received through Mr. W. T. Swingle, February, 1900. Distributed.

4606. LOPHOPHORA WILLIAMSII.

From Washington, D. C. Received through Mr. W. T. Swingle, March, 1900. Distributed.

4607. BRACHYCHITON ACERIFOLIA. **Flame tree.**

From Santa Ana, Cal. Presented by Dr. John M. Lacy through Mr. Newton B. Pierce.

4608. CELASTRUS SCANDENS.

From Manhattan, Kans. Presented by Mr. J. F. Swingle, through Mr. W. T. Swingle, March 8, 1899.

4609. BRAHEA GUADALUPENSIS ?

From La Paz, Lower California, Mexico. Received through Mr. W. T. Swingle, February, 1900.

4610. PHŒNIX DACTYLIFERA. **Date.**

From Washington, D. C. Received through Mr. W. T. Swingle, March, 1900.

Deglet Noor. Bought at a Washington fruit market. Distributed.

4611. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Deglet Noor.

4612. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Degla Beida.

4613. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Todala techeleff. Distributed.

4614. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Horra. Distributed.

4615. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Possibly *Medjhoul.* A large, unnamed date.

4616. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Deglet Noor.

4617. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Tedalla (?).

4618. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Ghero. Distributed.

4619. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Bent Kabala (?). Distributed.

4620. PHŒNIX DACTYLIFERA. **Date.**

Probably from M'Zab oasis, Sahara. Presented by Yahia ben Kassem, through Mr. W. T. Swingle, March, 1900.

Possibly *Medjhoul.* An unnamed, medium-sized fruit. Distributed.

4621. ANDROPOGON SORGHUM. **Kafir corn.**

From Berryton, Kans. Presented by Mr. M. Mathewson, March 6, 1900.

Mammoth black-hulled white. Distributed.

4622. DIOSPYROS VIRGINIANA. **Persimmon.**

From Lodema, Mo. Presented by Mr. R. A. W. Argenbright, March 10, 1900.

4623. NICOTIANA TABACUM. **Tobacco.**

From Sagua la Grande, Cuba. Presented by Feodoro Miranda, March 12, 1900.

4624. CRATÆGUS MEXICANA. **Haw.**

From Coahuila, Mexico. Presented by Prof. Felix Foêx, of Torreon. Received March 12, 1900.

4625. CRATÆGUS MEXICANA. **Haw.**

From Coahuila, Mexico. Presented by Prof. Felix Foêx, of Torreon. Received March 12, 1900.

Seeds from fruits of largest size and finest flavor.

4626. GOSSYPIUM BARBADENSE. **Cotton.**

From Egypt. Received March 13, 1900.

Gordon Pasha. An improved strain of Egyptian cotton, introduced for the first time. Seed purchased in Italy.

4627. PHASEOLUS VULGARIS. **Bean.**

From San Antonio, N. Mex. Received from Mr. C. B. Allaire, March 13, 1900.

A variety commonly grown by the Mexicans. It forms the staple food of the laboring classes of New Mexico.

4628. GLYCINE HISPIDA. **Soy bean.**

From Massachusetts. Received March 13, 1900.

Medium green. Distributed.

4629. MEDICAGO SATIVA. **Alfalfa.**

From Colorado. Received March 16, 1900.

Colorado-grown seed. Distributed.

4630. FICUS ELASTICA. **India rubber.**

From Italy. Received March 13, 1900. Distributed.

4631. TRITICUM VULGARE. **Wheat.**

From Idaho. Received March 14, 1900.

Canadian Hybrid. One of the standard wheats grown in Idaho, Wyoming, and Washington.

4632. CENTAUREA ODORATA. **Dusty miller.**

From Italy. Received May 19, 1900. Presented by Dammann & Co., of San Giovanni a Teduccio, near Naples, Italy, through Hon. A. H. Byington, United States consul at Naples.

Centennial Chameleon. "A new hybrid annual which changes color several times during the season. Plant in pots and transplant to sunny spot in rich soil." (*Dammann.*)

4633. TRITICUM VULGARE. **Wheat.**

From Idaho. Received March 14, 1900.

Red Chaff. One of the standard wheats of Idaho, Washington, and Oregon.

4634. PYRUS BACCATA GENUINA. **Siberian crab-apple.**

From Russia. Received March 18, 1900. Presented by Dr. A. Fischer von Waldheim, director of the Imperial St. Petersburg Botanic Garden. Distributed.

4635. NICOTIANA TABACUM. **Tobacco.**

From Sumatra. Received March 21, 1900.

Deli.

4636. ERYTHRINA. **Coral tree.**

From Mexico. Received March 21, 1900. Presented by Mr. Herman Meenen, of Harsenville, Fla.

Zumpantle, or *Coralines.*

4637. COBÆA SCANDENS. **Cobæa.**

From Mexico. Received March 21, 1900. Presented by Mr. Herman Meenen, of Harsenville, Fla.

A vigorous climbing plant with beautiful blue flowers.

4638. ANONA CHERIMOLIA. **Cherimoya.**

From Mexico. Received March 21, 1900. Presented by Mr. Herman Meenen, of Harsenville, Fla.

"Considered by many one of the finest fruits in existence. Being very tender, it can only be grown successfully in the extreme southern portion of Florida." (*Meenen.*)

4639. CANNABIS SATIVA. **Hemp.**

From Kentucky. Received March 22, 1900. Distributed.

4640–4748. VITIS VINIFERA. **Grape.**

A collection of European grapes from Alexandre Tacussel, of Vaucluse, France, imported in cooperation with the Division of Pomology. No cuttings are now available for distribution. (See Nos. 2381–2541, Inventory No. 5.) Distributed.

4640. ADMIRABLE DE COURTILLER.
4641. ADMIRABLE DE COURTILLER.
4642. BICANE.
4643. BURGRAVE DE HONGRIE.
4644. CHASSELAS NAPOLÉON.
4645. CORNICHON BLANC.
4646. CORNICHON NOIR.
4647. DATTIER DE BEYROUTH.
4648. DIAMANT TRAUBE.
4649. FINTINDO.
4650. FOSTER'S SEEDLING.
4651. FRANKENTHAL HÂTIF.
4652. GÉNÉRAL LAMARMORA.
4653. GÉNÉRAL LAMARMORA.
4654. GOLDEN CHAMPION.
4655. GRADISKA.
4656. HENAB TURKI.
4657. JOANNENC.
4658. JOANNENC.
4659. ZABALKANSKOI.
4660. MALVOISIE DE SITJES.
4661. MALVOISIE DE SITJES.
4662. MAMELON.
4663. MAMELON.
4664. MUSCAT DE MADÈRE ROSE.
4665. MUSCAT HÂTIF DU PUY DE DÔME.
4666. MUSCAT ST. LAURENT.
4667. OLIVETTE DE CADENET.
4668. OLIVETTE DE CADENET.
4669. PIS DE CHEVRE DES ALPES.
4670. ROSAKI.
4671. SULTANINA.
4672. TRENTHAM BLACK.
4673. TRENTHAM BLACK.
4674. VERDELHO DE MADÈRE.
4675. VERDELHO DE MADÈRE.
4676. ACTONI MACÉRON.
4677. AIBATHY ISJUM.
4678. ANGÉLINA.
4679. ANGULATA.
4680. BAUDE.

4640–4748. Vitis vinifera—Continued.

4681. Bellino.
4682. Bermestia bianca.
4683. Boheraave.
4684. Chasselas St. Bernard.
4685. Citronelle.
4686. Citronelle.
4687. Duc de Magenta.
4688. Frankenthal blanc.
4689. Hambourg blanc.
4690. Imperial.
4691. Karoad.
4692. Merveille de Vaucluse.
4693. Muscat noir précoce.
4694. Muscat de Saumur.
4695. Muscat violet.
4696. Olivette rose.
4697. Raisaine de Pulliat.
4698. West St. Peters.
4699. Chasselas de Jérico.
4700. Gamay de Bourgogne.
4701. Gruner Muscateller.
4702. Long noir d'Espagne.
4703. Olivette noir.
4704. Razaki zolo.
4705. Agostenga.
4706. Agostenga.
4707. Muscat Bowood.
4708. Buckland Sweetwater.
4709. Calabrèse.
4710. Calabrèse.
4711. Chasselas de Florence.
4712. Chasselas de Montauban.
4713. Chasselas de Negrepont.
4714. Chasselas de Negrepont.
4715. Chasselas musqué vrai.
4716. Chasselas musqué vrai.
4717. Chasselas violet.
4718. Chasselas Napoléon.
4719. Chasselas rose royal.
4720. Tokay blanc.
4721. Clairette pointue.
4722. Cornichon noir.
4723. Diamant Traube.

4640–4748. Vitis vinifera—Continued.

4724. Folle blanche.

4725. Joannenc charnu.

4726. Luglienga néra.

4727. Madeleine angevine.

4728. Madeleine angevine.

4729. Bicolor.

4730. Muscat de Alexandrie.

4731. Muscat de Alexandrie.

4732. Muscat de Hambourg.

4733. Muscat de Hambourg.

4734. Muscat rouge de Madère.

4735. Zabalkanskoi.

4736. Parc de Versailles.

4737. Parc de Versailles.

4738. Pinot noir de Bourgogne.

4739. Pinot blanc.

4740. Pinot blanc de Chardonnay.

4741. Pis de chevre noir.

4742. Precoce de Courtiller.

4743. Rosaki.

4744. Rousselet.

4745. Servan.

4746. Servan.

4747. Sirah de l'ermitage.

4748. Ulliade noir.

4749. (Blank.)

4750. Pistacia terebinthus. **Terebinth.**

Presented by Mr. G. P. Rixford, of the California Academy of Sciences, San Francisco, Cal., January, 1900.

To be used for stocks on which to graft the pistache. Distributed.

4751. Tuber melanosperma. **Truffle.**

From Paris, France. Received March 30, 1900.

(See No. 2230, Inventory No. 5.) Distributed.

4752. Ficus carica. **Smyrna fig.**

From California. Presented by Mr. George C. Roeding, March, 1900.

4753. Persea pumila.

From Eustis, Fla. Presented by Mr. Frank W. Savage, March, 1899.

4754-4808.

A collection of seeds of native American plants growing near Washington, D. C. Presented by the Seed Laboratory, March, 1900.

4754. Clematis ochroleuca.

4755. Euonymus atropurpureus.

4754–4808—Continued.

4756. Agrimonia parviflora.
4757. Viburnum dentatum.
4758. Saponaria officinalis.
4759. Arctium lappa.
4760. Cratægus crus-galli.
4761. Magnolia acuminata.
4762. Panicum elongatum.
4763. Leonurus cardiaca.
4764. Smilax herbacea.
4765. Vagnera racemosa.
4766. Polymnia uvedalia.
4767. Smilax rotundifolia.
4768. Polygonum sagittatum.
4769. Lobelia inflata.
4770. Alnus rugosa.
4771. Magnolia tripetala.
4772. Saururus cernuus.
4773. Agropyron tenerum.
4774. Euonymus americanus.
4775. Elephantopus.
4776. Polygonum dumetorum.
4777. Silphium trifoliatum.
4778. Andropogon nutans.
4779. Onosmodium caroliniana.
4780. Monarda punctata.
4781. Erechtites hieracifolia.
4782. Nyssa aquatica.
4783. Benzoin benzoin. Distributed.
4784. Baptisia australis.
4785. Xolisma ligustrina.
4786. Prunella vulgaris.
4787. Vaccinium stamineum.
4788. Verbesina occidentale.
4789. Staphylea trifolia.
4790. Apocynum album.
4791. Cassia nictitans.
4792. Lechea racemulosa.
4793. Cyperus ovularis.
4794. Polygonum punctatum.
4795. Rosa humilis.
4796. Pentstemon lævigatus.
4797. Helenium autumnale. Distributed.
4798. Tecoma stans.
4799. Gemminga chinensis.

4754–4808—Continued.

4800. Solidago serotina.

4801. Andropogon provincialis. Distributed.

4802. Poa compressa.

4803. Eupatorium perfoliatum. Distributed.

4804. Phytolacca decandra.

4805. Dipsacus sylvestris.

4806. Verbesina alternifolia.

4807. Gaura biennis.

4808. Vernonia. Distributed.

4809. Andropogon sorghum. **Kafir corn.**

From Manhattan, Kans. Presented by Prof. H. M. Cottrell, through Mr. W. T. Swingle, April, 1900.

Black-hulled White.

4810. Andropogon sorghum. **Kafir corn.**

From Manhattan, Kans. Presented by Prof. H. M. Cottrell, through Mr. W. T. Swingle, April, 1900.

Red. Distributed.

4811. Phœnix dactylifera. **Date.**

From Washington, D. C. Received through Mr. W. T. Swingle, March, 1900. Distributed.

4812. Phœnix dactylifera. **Date.**

From Washington, D. C. Received through Mr. W. T. Swingle, March, 1900. Distributed.

4813. Phœnix dactylifera. **Date.**

From Guaymas, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4814. Fraxinus velutina. **Ash.**

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899. Distributed.

4815. Phoradendron juniperinum.

From Mescalero, N. M. Presented by Miss Minnie Pincumb, through Mr. W. T. Swingle, December, 1899.

Parasite on fir. Distributed.

4816. Karwinskia parviflora.

From Hermosillo, Mexico. Received through Mr. W. T. Swingle, December, 1899.

Shrub 2 to 3 feet high. Leaves like *Psidium guava*.

4817. Cereus pringlei.

From Guaymas, Mexico. Presented by the U. S. National Museum, March, 1900.

4818. Cereus pecten-aboriginum.

From Mazatlan, Mexico. Presented by the U. S. National Museum, March, 1900.

4819. RUBUS.

From Puyallup, Wash. Received through Mr. W. T. Swingle, October, 1899.

A perennial evergreen blackberry. Distributed.

4820. CELASTRUS SCANDENS. **Bittersweet.**

From Manhattan, Kans. Presented by Mr. J. F. Swingle, March, 1900. Distributed.

4821. LOPHOPHORA LEWINII.

From Washington, D. C. From plants growing in S. P. I. greenhouse. Received March, 1900. Distributed.

4822. PANICUM BULBOSUM.

From Washington, D. C. From plants growing in S. P. I. greenhouse. Received March, 1900.

A panicled grass, resembling a small *Sorghum halapense*. Distributed.

4823 QUERCUS MACROCARPA. **Bur oak.**

From Manhattan, Kans. Presented by Prof. A. S. Hitchcock, April 20, 1900.

4824. BOUTELOUA CURTIPENDULA.

From Manhattan, Kans. Presented by Prof. A. S. Hitchcock, April 20, 1900. Distributed.

4825. BULBILIS DACTYLOIDES. **Buffalo grass.**

From Manhattan, Kans. Presented by Prof. A. S. Hitchcock, April 20, 1900.

4826–4840.

From Avalon, Santa Catalina Island, California. Received through Mrs. Blanche Trask, May 1, 1900. A collection of seeds of native plants as follows:

4826. ANTIRRHINUM SPECIOSUM. Distributed.

4827. LUPINUS.

4828. HETEROMELES ARBUTIFOLIA.

4829. LEPTOSYNE GIGANTEA.

4830. CERCOCARPUS TRASKIÆ.

4831. CROSSOSOMA CALIFORNICUM.

4832. ERIOGONUM GIGANTEUM.

4833. ARCTOSTAPHYLOS BICOLOR.

4834. QUERCUS TOMENTELLA.

4835. ERIOPHYLLUM NEVINII.

4836. QUERCUS MACDONALDI.

4837. LAVATERA ASSURGENTIFOLIA.

4838. CEANOTHUS ARBOREUS.

4839. ARCTOSTAPHYLOS DIVERSIFOLIA.

4840. RIBES VIBURNIFOLIA.

4841. CRESCENTIA ALATA.

From California. Presented by Dr. F. Franceschi, through Dr. Edward Palmer, May 5, 1900.

4842. (Blank.)

4843. (Blank.)

4844–4854. TRIFOLIUM PRATENSE. **Red clover.**

From Hamburg, Germany. Received March 17, 1900.

This collection of seed of various red clovers was imported for use in a series of cooperative experiments conducted by the agricultural experiment stations of Minnesota and Wisconsin. It is often claimed that the American strains of red clover are of less value for forage than the European. It is also stated by various agriculturists that the cause of this inferiority is the greater narrowness of the leaves and the coarser and more weedy habit of growth of the stems. However, the amount of forage per acre is said to be greater in the case of the American than of the European forms. The experiments at the above-mentioned stations are being connected in order to determine whether such differences as are claimed really exist between the best American and the European varieties or forms. They are as follows:

4844. HUNGARIAN.

4845. ITALIAN.

4846. FRENCH.

4847. GALICIAN.

4848. RUSSIAN.

4849. TRANSYLVANIAN.

4850. STEIERMARK.

4851. LEITMERITZ.

4852. NORWEGIAN. Distributed.

4853. GERMAN.

4854. ENGLISH.

4855. TRITICUM VULGARE. **Wheat**

From German East Africa. Received March 20, 1900. Presented by Dr. Wittmack, of the Agricultural High School, Berlin, Germany.

Tabora. A rust-proof winter wheat of excellent yield and quality.

4856–4905.

A collection of seeds and plants from Wuchang, China. Received March 20, 1900. Presented by Messrs. G. D. Brill and J. W. Gilmore.

4856. SESAMUM INDICUM. **Sesame.**

Heh-scz-ma; black sesame. (No. 27.) "This is not so extensively grown here as the white sesame, No. 4857." (*Gilmore.*)

4857. SEASAMUM INDICUM. **Sesame.**

Beh-scz-ma; white sesame. (No. 25.)

4858. PHASEOLUS VULGARIS. **Bean.**

Ni-do. (No. 13.)

4859. CUCURBITA.

Lang gua. (No. 4.) "A large gourd or pumpkin." (*Gilmore.*)

4860. BETA VULGARIS. **Chard.**

Tien beh tsai. (No. 24.) "A sweet, white vegetable. This is the popular summer salad here. It grows larger than either No. 4874 or No. 4896. Several crops of this are taken from the same piece of ground during the course of the summer." (*Gilmore.*)

4856–4905—Continued.

4861. Ipomœa.

Tso yea rsia; bamboo leaf vegetable. (No. 3.) "This grows here abundantly, but I can not identify the plant by the name. I think, however, it is used something like spinach." (*Gilmore.*)

4862. Brassica.

Yo tsai; oil vegetable. (No. 12.) "A mustard which is sown in the spring and grown for its seed, from which oil is extracted." (*Gilmore.*)

4863. Capsicum annuum. **Red pepper.**

Chin la joa. (No. 29.)

4864. Canavalia ensiformis. **Knife bean.**

Tao do. (No. 2.)

4865. Citrullus. **Citron.**

Tung gua. (No. 40.) "A large green gourd, white inside. The largest are about 3 feet long and a foot in diameter." (*Gilmore.*)

4866. Avena fatua glabrescens. **Wild oat.**

Red oats. (No. 43.)

4867. Momordica. **Gourd.**

Ku gua. (No. 16.) "A kind of squash which is very warty, and red when ripe." (*Gilmore.*)

4868. Cucumis sativus. **Cucumber.**

Whang gua; yellow cucumber. (No. 14.) "This is grown very extensively here in the spring, though it does not yield abundantly." (*Gilmore.*)

4869. Chætochloa italica. **Millet.**

Tsan schioh. (No. 36.) "This seed is used for feeding birds." (*Gilmore.*)

4870. Raphanus sativus. **Radish.**

Turnip. A white variety. (No. 22.)

4871. Sapium sebiferum. **Wax berry.**

Beh jo; white wax berry. (No. 44.) "These are the seeds from the white wax tree. The tree grows from 30 to 60 feet high and bears an abundance of berries on new wood." (*Gilmore.*)

4872. Helianthus annuus. **Sunflower.**

Quei wha. (No. 31.) "This is not grown very extensively here except as an ornament. The flowers are 8 or 10 inches in diameter." (*Gilmore.*)

4873. Celosia.

Han tsai. (No. 9.)

4874. Brassica. **Petsai.**

Heh beh tsai; black white vegetable. (No. 18.) "This is a winter and spring cabbage, and the habits and appearance are quite like those of No. 4896, except that the leaves are not curled. This winter the temperature has been as low as —5° C. and it has not been injured." (*Gilmore.*)

4875. Raphanus sativus. **Radish.**

Loh boh. (No. 21.)

4856–4905—Continued.

4876. AVENA FATUA GLABRESCENS. **Wild oat.**

Mixed oats. (No. 47.)

4877. MALVA. **Mallow.**

Tung han tsai. (No. 19.) "A winter variety." (*Gilmore.*)

4878. ORYZA SATIVA. **Rice.**

Tsan gu. (No. 35.) "This is the ordinary rice which is the great staple of China." (*Gilmore.*)

4879. ZEA MAYS. **Corn.**

U gao liang. (No. 39.) A kind of maize.

4880. ORYZA SATIVA. **Rice.**

Loh gu; glutinous rice. (No. 34.)

4880a. FAGOPYRUM ESCULENTUM. **Buckwheat.**

(No. 34.)

4881. BRASSICA. **Mustard.**

La tsai. (No. 11.) This is a large mustard, and is almost like No. 4887.

4882. IPOMŒA BONA-NOX. **Moonflower.**

Tien chue. (No. 28.)

4883. STERCULIA PLATANIFOLIA.

Wu tung. (No. 45.)

4884. PHASEOLUS VULGARIS. **Bean.**

Tung tsao do. (No. 1.)

4885. BRASSICA.

Heh beh tsai. (No. 26.)

4886. LÁCTUCA SATIVA. **Lettuce.**

Wo ju. (No. 17.) "A kind of lettuce. It is sown in beds in the spring and transplanted when the plants are 2 or 3 inches high. It is then well manured and watered until its leaves are a foot or more in height. The plant is grown for the stem, which is sliced and cooked as a vegetable." (*Gilmore.*)

4887. BRASSICA. **Mustard.**

Gai tsai. (No. 7.) "This is a very large mustard. In exceptional instances the leaves will grow 3 feet long. It is transplanted in the early spring and heavily manured until the leaves reach their full size. The plants are then cut off at the roots and dried; they are then pickled and used throughout the year." (*Gilmore.*)

4888. HORDEUM VULGARE. **Barley.**

Da meh. (No. 33.) "This is used in the North to some extent for whisky, so I have heard, but here it is used for making sugar for candies and for feeding horses and pigs. It is a winter crop, planted on land which has been overflowed in the summer, or upon cotton, bean, or sesame land." (*Gilmore.*)

4889. APIUM GRAVEOLENS. **Celery.**

Chin tsai. "This seems to be a primitive type. It is small and spindling. It is planted both in the spring and fall in beds and covered with reeds, placed like the roof of a house. When it is about grown fine dirt is sprinkled and sifted among the plants until they are almost covered. The celery bleaches in a short time and is then used as needed." (*Gilmore.*)

4856–4905—Continued.

4890. CRATÆGUS CUNEATA. **Hawthorn.**

San tsao hung. (No. 23.) Fruit about the size of a cherry.

4891. CELOSIA.

Wan tsai. (No. 20.)

4892. AVENA SATIVA. **Oat.**

Black. (No. 42.) "Found growing wild in old gardens and waste places." (*Gilmore.*)

4893. LAGENARIA. **Calabash.**

Hu gua. (No. 15.)

4894. BUTNERIA. **Flowering almond.**

La may wha. (No. 41.)

4895. LUFFA ÆGYPTIACA. **Gourd.**

Tsz gua; silk gourd. (No. 5.) "It sometimes grows 5 feet long and not more than an inch in diameter, except at the bottom. It is planted in the spring and trained on a trellis. The gourds are used for food when they are young and tender." (*Gilmore.*)

4896. BRASSICA. **Petsai.**

Nan kin beh tsai; white vegetable. (No. 6.) "This is a cabbage and is grown extensively in fall and winter." (*Gilmore.*)

4897. SPINACEA OLERACEA. **Spinach.**

Bo tsai. (No. 8.) It is planted in the spring and used as greens.

4898. CHRYSANTHEMUM.

Tung hao. (No. 32.) "According to William's Dictionary this is a kind of celery." (*Gilmore.*)

4899. CITRULLUS VULGARIS. **Watermelon.**

Sez gua tsz. (No. 30.) "They are mainly of two varieties, those of red flesh and those of yellow. Neither grow very large, but the red-fleshed one is preferred to the other. Salted seeds are highly esteemed at dinners and feasts and are eaten throughout the meal." (*Gilmore.*)

4900. PAULOWNIA IMPERIALIS. **Paulownia.**

Yang wu tung. (No. 49.) This is an ornamental tree of rapid growth, having large leaves and flowers very much like those of the catalpa.

4901. ALLIUM. **Garlic.**

Da suan. (No. 46.)

4902. TRITICUM VULGARE. **Wheat.**

Hsioh meh. (No. 37.) "This is extensively grown here for flour. Here, where so much of the land is overflowed in the summer, this is the principal crop on the lowlands, and it is mostly of the bearded kind."

4903. CELTIS. **Hackberry.**

Tung ti hsu. (No. 48.) This tree grows rapidly and to a large size. It is not very common.

4904. CANAVALIA ENSIFORMIS. **Knife bean.**

(No. 2.)

4905. ANDROPOGON SORGHUM. **Sorghum.**

Loh goa liang. (No. 38.) "This is a nonsaccharine sorghum. There are two or three kinds, but the main use of all is for making a kind of whisky." (*Gilmore.*)

4906. NICOTIANA TABACUM. **Tobacco.**

From Turkey. Received April 7, 1900.

Turkish Samsum.

4907. NICOTIANA TABACUM. **Tobacco.**

From Turkey. Received April 7, 1900.

Turkish Bafra.

4908. FRAGARIA VESCA. **Strawberry.**

From France. Received April 10, 1900.

St. Antoine de Padoua, everbearing. "This variety, which was sent out in 1898 by the Abbé Thivolet, was obtained by crossing the St. Joseph with the large-fruited English Royal Sovereign. The fruits of this sort are larger than those of the St. Joseph, are firm, good keepers, and have an excellent flavor. The fruit clusters are erect and do not require support as do those of the St. Joseph. This is the newest and most remarkable of the large-fruited, everbearing strawberries." (*Swingle.*) Distributed.

4909. PRUNUS. **Cherry.**

From Waynesville, N. C. Presented by Dr. G. D. Green. Received April 10, 1900.

"This wild cherry goes by two names—the Peruvian Tree and the Balsam Cherry." (*Green.*) Distributed.

4910. PSIDIUM CATTLEYANUM. **Dwarf guava.**

From Waterloo, Kans. Received March 24, 1900. Presented by Mr. J. W. Riggs.

A seedling of dwarf guava which lives and bears fruit in Kansas. Distributed.

4911. PUNICA GRANATUM. **Pomegranate.**

From Waterloo, Kans. Received March 24, 1900. Presented by Mr. J. W. Riggs.

A very hardy seedling pomegranate which lives and bears fruit in Kansas. Distributed.

4912–4914. GLYCINE HISPIDA. **Soy bean.**

A collection of soy beans from Japan. Received March 23, 1900. They are as follows:

4912. COMMON. Distributed.

4913. BEST WHITE. Distributed.

4914. BEST GREEN. Distributed.

4915–4946.

From Perth, West Australia. Received March 24, 1900. Presented by Mr. E. F. Brady.

A collection of seeds of native West Australian plants.

4915. KINGIA AUSTRALIS.

4916. ACTINOTUS LEUCOCEPHALUS. **Flannel flower.**

4917. LESCHENAULTIA.

A small perennial, 18 inches high, with blue flowers.

4918. **Christmas bush.**

4915–4946—Continued.

4919. Gastrolobium calycinum.
A poison plant.

4920. Waitzia aurea.

4921. Myriocephalus stuartii.

4922. **White clematis.**
A handsome climber. Distributed.

4923.
An annual with blue, lobelia-like flowers.

4924. Australina muelleri. **Kangaroo paw.**

4925. Helichrysum bracteatum. **Everlasting.**

4926. **Flannel flower.**
An annual.

4927. **Coral creeper.**
The seeds must be scalded and soaked before planting.

4928.
A fine summer-flowering plant with pink sprays.

4929. Hibiscus.
Flowers lilac.

4930.
A small, yellow-flowered legume.

4931.
A dwarf perennial shrub.

4932. **Flannel flower.**

4933.
A bamboo-like plant.

4934.
A native annual lobelia with deep-blue flowers.

4935. Hardenbergia.
A climber with fine blue flowers. Makes a fine show in our woods.

4936. Banksia.
A short, prickly shrub.

4937. Australina.
Tall, green-flowering. Grown on swampy land.

4938. Callistemon. **Scarlet bottle-bush.**
Flowers scarlet. Grows in dry situations.

4939. Acacia. **Wattle.**
Flowers bright golden. Grows 2 feet high.

4915–4946—Continued.

4940.

Smoke plant.

4941. **Marguerite.**

A perennial with large, single white flowers. Distributed.

4942. HOVEA.

Blue mixed. Distributed.

4943. **Scarlet grevillea.**

A shrub, in dry situations.

4944. BANKSIA GRANDIS. **Bull banksia.**

A handsome tree.

4945.

An annual with white flowers.

4946.

A dwarf plant like *Banksia*, with long, serrated leaves.

4947–4962.

A collection of Mexican species of *Physalis*. Received March 27, 1900. Presented by Dr. Edward Palmer.

4947. PHYSALIS.

From Zacatecas, Mexico. "Fruit the size of a cherry; in color pea green to a yellow tint; quite sticky; used with red peppers in sauce to neutralize the bad effect of excessive use of red pepper." (*Palmer.*)

4948. PHYSALIS.

From San Luis Potosi, Mexico. "A fine species, with a rather flat fruit, plum-colored at base, solid and purplish when ripe." (*Palmer.*)

4949. PHYSALIS.

From Durango, Mexico. "The fruit has a fine aroma; is edible raw; very prolific, of good size, and worthy of cultivation." (*Palmer.*)

4950. PHYSALIS.

From Zacatecas, Mexico. "A species with husk entirely covering the fruit and extending above. Fruit is round and plum-colored." (*Palmer.*)

4951. PHYSALIS ALKENGI.

From Mexico. "Fruit edible raw, of fine flavor." (*Palmer.*)

4952. PHYSALIS.

From San Luis Potosi, Mexico.

4953. PHYSALIS.

From San Luis Potosi, Mexico.

4954. PHYSALIS FENDLERI.

From Acapulco, Mexico. "Used in soups, gravies, and stuffings for fowls. This fruit is found all the year round in the markets of Acapulco." (*Palmer.*)

4947–4962—Continued.

4955. PHYSALIS.

From Mapimi, Durango, Mexico. "Fruit yellow, with an agreeable odor and good to eat. Yields abundantly. A low plant. Worthy of cultivation." (*Palmer.*)

4956. PHYSALIS.

From San Luis Potosi, Mexico. "Large fruit having a husk which opens in two parts so that the top of the fruit is bare. (*Palmer.*)

4957. PHYSALIS.

From San Luis Potosi, Mexico.

4958. PHYSALIS.

From San Luis Potosi, Mexico. "A large-fruited species which is covered entirely by a husk that is purple at the base." (*Palmer.*)

4959. PHYSALIS.

From San Luis Potosi, Mexico. "This form has a very close-fitting, smooth husk with rather prominent veins at the base." (*Palmer.*)

4960. PHYSALIS.

From Durango, Mexico. "This species has a very strong odor and is as sticky as tobacco." (*Palmer.*)

4961. PHYSALIS.

From San Luis Potosi, Mexico. Distributed.

4962. PHYSALIS.

From San Pedro Soapuilla, Aguascalientes, Mexico. "It is one of the finest varieties." (*Palmer.*)

4963. NICOTIANA. **Tobacco.**

From Durango, Mexico. Received March 27, 1900. Presented by Dr. Edward Palmer.

"Strong grower, large leaves, very gummy, strong odor; once used by native population." (*Palmer.*) Distributed.

4964. PENNISETUM SPICATUM. **Pearl millet.**

From Kangundo, British East Africa. Presented by Mr. Charles F. Johnston.

Nirali. Distributed.

4965-5002.

From Yokohama, Japan. Received March 27, 1900. A collection of vegetable seeds presented by Suzuki & Iida, New York City.

4965. CITRULLUS VULGARIS. **Watermelon.**

4966. PHASEOLUS VULGARIS. **Bean.**

4967. CRYPTOTÆNIA CANADENSIS.

Mitsuba.

4968. BRASSICA NAPUS. **Turnip.**

Tennoji.

4969. SALSOLA SODA.

4965–5002—Continued.

4970. Canavalia ensiformis. **Knife bean.**
Natamame.

4971. Perilla arguta.

4972. Tetragona expansa. **New Zealand spinach.**

4973. Dolichos umbellatus.
Jinroku-sasage.

4974. Dolichos umbellatus.
Sanjak-sasage.

4975. Beta vulgaris. **Beet.**
Fudanso.

4976. Cucurbita longa.
Naga-yugao.

4977. Allium porrum. **Leek.**
Tokio.

4978. Allium porrum. **Leek.**
Iwatsuki.

4979. Allium porrum. **Leek.**
Shimo-vita.

4980. Glycine hispida. **Soy bean.**
Early soja.

4981. Lappa major.
Yamato.

4982. Lappa major.
Red Stalk.

4983. Lappa major.
Sunagawa.

4984. Phaseolus vulgaris. **Bean.**
Buff.

4985. Phaseolus vulgaris. **Bean.**
Prolific climber.

4986. Chrysanthemum coronarium. **Edible chrysanthemum.**

4987. Luffa ægyptiaca. **Vegetable sponge.**

4988. Daucus carota. **Carrot.**
Long red.

4989. Cucumis sativus. **Cucumber.**
Late.

4990. Cucumis sativus. **Cucumber.**
Medium green.

4965–5002—Continued.

4991. CUCUMIS SATIVUS. **Cucumber.**
Joint fruiting.

4992. CUCUMIS SATIVUS. **Cucumber.**
Common.

4993. CUCUMIS MELO. **Muskmelon.**
Makwa-wir.

4994. SOLANUM MELONGENA. **Egg plant.**
Sadowara.

4995. SOLANUM MELONGENA. **Egg plant.**
Early prolific.

4996. RAPHANUS SATIVUS. **Radish.**
Everlasting.

4997. RAPHANUS SATIVUS. **Radish.**
Summer.

4998. RAPHANUS SATIVUS. **Radish.**
Long Otapuka.

4999. BENINCASA CERIFERA. **Wax gourd.**

5000. LAGENARIA VULGARIS. **Large gourd.**
Ohiotau.

5001. CUCURBITA MAXIMA. **Pumpkin.**

5002. CUCURBITA MAXIMA. **Pumpkin.**
Early Crèpe.

5003–5020.

From Yokohama, Japan. Received March 27, 1900. A collection of seeds of the native forest trees of Japan, presented by Suzuki & Iida, of NewYork City.

5003. ABIES BRACHYPHYLLA. **Fir.**

5004. ABIES FIRMA. **Fir.**

5005. ABIES VEITCHII. **Fir.**

5006. CARPINUS YEDOENSIS. **Hornbeam.**

5007. CELTIS BUNGEANA. **Hackberry.**

5008. CORNUS KOUSA. **Cornel.**

5009. CRYPTOMERIA JAPONICA. Distributed.

5010. EDGEWORTHIA GARDNERI.

5011. ELÆAGNUS UMBELLATUS.

5012. ILLICIUM ANISATUM.

5013. JUGLANS SIEBOLDIANA. **Walnut.**

5014. JUNIPERUS RIGIDA. **Juniper.**

5015. QUERCUS ACUTA. **Oak.**

5016. RHUS SUCCEDANEA. **Tallow tree.**

5017. THEA VIRIDIS. Distributed. **Tea.**

5003–5020—Continued.

5018. Torreya nucifera.

5019. Xanthoxylon piperitum.

5020. Zelkova acuminata.

5021. Cannabis sativa. **Hemp.**

From Shanghai, China. Received March 28, 1900. Presented by Dr. Kung, through Mr. Young S. Allen. Distributed.

5022. Thea viridis. **Tea.**

From Heneratgoda, Ceylon. Received March 28, 1900.

Best Assam Hybrid. Distributed.

5023. Landolphia kirki.

From Heneratgoda, Ceylon. Received March 28, 1900.

This is one of the African lianes from which commercial rubber is extracted. Distributed.

5024. Urceola esculenta.

From Heneratgoda, Ceylon. Received March 28, 1900.

An East Indian rubber plant. Distributed.

5025. Opuntia pubescens.

From Heneratgoda, Ceylon. Received March 28, 1900. Presented by J. P. William & Bros.

A prickly-pear cactus which is valuable as a forage plant. Distributed.

5026. Nopalia cochinellifera.

From Heneratgoda, Ceylon. Received March 28, 1900. Presented by J. P. William & Bros. Distributed.

5027. Payena leerii.

From Heneratgoda, Ceylon. Received March 28, 1900.

An East Indian rubber plant. Distributed.

5028. Manihot glaziovii. **Ceara rubber.**

From Heneratgoda, Ceylon. Received March 28, 1900. Distributed.

5029. Mimusops elengi.

From Heneratgoda, Ceylon. Received March 28, 1900.

An East Indian tree from which a commercial guttapercha is extracted. Distributed.

5030. Cucumis sativus. **Cucumber.**

From Heneratgoda, Ceylon. Received March 28, 1900. Presented by J. P. William & Bros.

An especially fine cucumber for cultivation in the tropics.

5031. Secale cereale. **Rye.**

From Schlansted, Germany. Received March 30, 1900.

Schlansted Winter. An improved strain, originated in Germany. The grain is one of the best for bread-making purposes.

5032. AVENA SATIVA. **Oat.**

From France. Received March 30, 1900.

Avoine rousse couronnée. "Grain red, short; chaff very thin; straw is stiff and does not lodge readily; very productive, but late." (*Vilmorin.*)

5033. NICOTIANA TABACUM. **Tobacco.**

From Sumatra. Received March 30, 1900.

Sumatra Rano.

5034. ASTRAGALUS FALCATUS.

From France. Received March 30, 1900.

A leguminous forage plant.

5035. TRITICUM MONOCOCCUM. **Einkorn.**

From France. Received March 30, 1900.

Engrain. Distributed.

5036. TRITICUM MONOCOCCUM. **Einkorn.**

From France. Received March 30, 1900.

Commun. (See No. 5035.) Distributed.

5037. BETA VULGARIS. **Mangold.**

From Paris, France. Presented by Vilmorin-Andrieux et Cie. Received March 30, 1900.

Giant Half-sugar Rose.

5038. BETA VULGARIS. **Mangold.**

From Paris, France. Presented by Vilmorin-Andrieux et Cie. Received March 30, 1900.

Giant Half-sugar White. (See No. 5037.)

5039. GLYCINE HISPIDA. **Soy bean.**

From Paris, France. Received March 30, 1900. Presented by Vilmorin-Andrieux et Cie.

Extra early black-seeded. A very early maturing strain.

5040. PACHYRHIZOS TUBEROSUS. **Yam-bean.**

From Italy. Received April 2, 1900.

Of possible value as a forage plant.

5041. NICOTIANA TABACUM. **Tobacco.**

From Italy. Received April 2, 1900.

Turkish Bafra. (See No. 4378.)

5042. VIGNA CATJANG. **Cowpea.**

From Georgia. Received April 4, 1900.

New Era. The earliest maturing variety of cowpea known. Distributed.

5043. FRAGARIA VESCA. **Strawberry.**

From Irapuato, Guanajuato, Mexico. Received April 6, 1900.

An everbearing strawberry. Distributed.

5044-5047. TRIFOLIUM PRATENSE. **Red clover.**

From Vienna, Austria-Hungary. Received April 7, 1900.

A collection of European red clovers:

5044. HUNGARIAN.

5045. RUSSIAN.

5046. STEIERMARK.

5047. TRANSYLVANIAN.

5048. TRITICUM VULGARE. **Wheat.**

From Minnesota. Received April 10, 1900. Presented by Prof. W. M. Hays, of the Agricultural Experiment Station, St. Anthony Park, Minn.

Minn. No. 169. Distributed.

5049. TRITICUM VULGARE. **Wheat.**

From Minnesota. Received April 10, 1900. Presented by Prof. W. H. Hays, of the Agricultural Experiment Station, St. Anthony Park, Minn.

Minn. No. 187. Distributed.

5050. TRITICUM VULGARE. **Wheat.**

From Minnesota. Received April 10, 1900. Presented by Prof. W. M. Hays, of the Agricultural Experiment Station, St. Anthony Park, Minn.

Minn. No. 149. Distributed.

5051. TRITICUM VULGARE. **Wheat.**

From Shanghai, China. Received through Consul-General Goodnow, April 11, 1900.

Pootung. Said to be grown on the lowlands between the Hwang-ho and Yangtse rivers. The Chinese report that this wheat is never attacked by rust.

5052. POA VIOLACEA.

From Steiermark, Bohemia. Received April 14, 1900. Presented by the director of the Samen Control Station, Vienna.

"From the Alps, near Aussee, at an altitude of 4,200 feet." Distributed.

5053. **Confederate grass.**

From Victoria, Tex. Received April 12, 1900. Presented by Mr. William Benton. Distributed.

5054. TRITICUM VULGARE. **Wheat.**

From Douglas, Wyo. Received April 14, 1900. Presented by Mr. B. C. Wheelock.

Seven-head wheat. "This wheat yielded 43 bushels per acre and weighed 63 pounds to the bushel."

5055. ZEA MAYS. **Corn.**

From Douglas, Wyo. Received April 14, 1900. Presented by Mr. B. C. Wheelock.

Longfellow. "This flint corn ripens in from 80 to 90 days from time of planting. It yields a heavy crop." (*Wheelock.*)

5056. EUGENIA UNIFLORA. **Surinam cherry.**

From Lemon City, Fla. Received April 13, 1900. Presented by Mr. E. J. Brown. Distributed.

5057. PANICUM MILIACEUM. **Broom-corn millet.**

From Walla Walla, Wash. Received April 16, 1900.

Seed grown in Washington. The original was imported by Prof. N. E. Hansen for this Department from Russia.

5058. SECALE CEREALE. **Rye.**

From Germany. Received through a French seedsman, April 26, 1900.

Petkus. This is an improved strain originated by a plant breeder at Petkus, a small town about 40 miles south of Berlin. It is one of the best varieties for bread making.

5059. AVENA SATIVA. **Oat.**

From Italy. Received through a French seedsman, April 26, 1900.

Gentile primo vera d' Umbria. A very early maturing variety with panicled heads and tall straw.

5060. BOUTELOUA OLIGOSTACHYA. **Blue grama.**

From Silver City, N. Mex. Received March 1, 1900. Distributed.

5061. LYCURUS PHLEOIDES. **Timothy grama.**

From Silver City, N. Mex. Received March 1, 1900. Distributed.

5062. MUSA. **Banana.**

From Manila, P. I. Received through Messrs. Lathrop and Fairchild (No. 389), April 14, 1900.

"A variety of banana with fruit filled with seed. The flavor is quite different from any other variety known to me and very agreeable. Imported for breeding experiments." (*Fairchild.*) Distributed.

5063. MANGIFERA INDICA. **Mango.**

From Manila, P. I. Received through Messrs. Lathrop and Fairchild (No. 390), April 14, 1900.

"Two seeds of a most delicious variety (name unknown) of mango, grown near Manila. Large, orange yellow, kidney-shaped. Pronounced by Mr. Lathrop as good as any Indian mango he ever ate. Very little fiber." (*Fairchild.*) Distributed.

5064. CAPSICUM ANNUUM. **Red pepper.**

From Manila, P. I. Received through Messrs. Lathrop and Fairchild (No. 388), April 14, 1900.

"Seeds of a large, bright-red, sweet pepper from Manila market." (*Fairchild.*) Distributed.

5065. MELALEUCA LEUCODENDRON. **Cajuput.**

From France. Received April 30, 1900.

An evergreen tree of large size, native from the Malayan Archipelago to Australia. Cajuput oil, extensively used in medicine, is extracted from the leaves. Distributed.

5066. MUCUNA UTILIS. **Velvet bean.**

From Florida. Received May 1, 1900. Presented to Hon. J. H. Brigham, Assistant Secretary of Agriculture, by Mr. Kline O. Varn, of Fort Meade, Fla. (See No. 4333, Inventory No. 8.)

5067. AGARICUS CAMPESTRIS. **Mushroom.**

From France. Received May 5, 1900. Presented by Vilmorin-Andrieux et Cie., Paris, France.

Vilmorin's New Mushroom Spawn. Grown from spores of the best mushrooms by Dr. Repin's process.

5068. LESPEDEZA STRIATA. **Japan clover.**

From Sardis, Miss. Received May 5, 1900.

An annual plant of especial value for covering barren soils in the Southern States.

5069. CANAVALIA ENSIFORMIS. **Knife bean.**

From Wahiawa, Oahu, H. I. Received May 8, 1900. Presented by Hon. Byron O. Clark.

"A large white bean brought here from California by a gardener. It is a strong grower and very productive." (*Clark.*)

5070. DOLICHOS. **Tongan bean.**

From Wahiawa, Oahu, H. I. Received May 8, 1900. Presented by Hon. Byron O. Clark.

"Imported from Australia. This bean will cover a trellis or outhouse. One plant will yield bushels of delicious beans, which may be either cut up like a French bean or shelled when nearly ripe. As the seed germinates slowly, it has been found a good plan to soak in boiling water before planting, so as to soften the hard outer skin." (*Clark.*)

5071. PHASEOLUS MUNGO. **Green gram.**

From Wahiawa, Oahu, H. I. Received May 8, 1900. Presented by Hon. Byron O. Clark.

A native of China

5072. PHASEOLUS MUNGO. **Green gram.**

From Wahiawa, Oahu, H. I. Received May 8, 1900. Presented by Hon. Byron O. Clark.

A native of China.

5073. CUCURBITA PEPO. **Vegetable marrow.**

From Wahiawa, Oahu, H. I. Received May 8, 1900. Presented by Hon. Byron O. Clark.

A native of Australia. "Very choice as a green squash; used as our butter squashes are." (*Clark.*)

5074. POLYGALA BUTYRACEA. **Polygala.**

From Paris, France. Received May 8, 1900. Presented by A. Godefroy-Lebeuf.

This plant produces a vegetable butter. It will grow in summer in the hot portions of California and Florida, and as the plants can be grown as annuals it will probably prove successful.

5075. TRITICUM VULGARE. **Wheat.**

From New South Wales, Australia. Received May 8, 1900.

Allora. This variety is obtained in Australia, though it is said to have come originally from California. It is medium or small in height, with red, bald, or slightly bearded heads. The grain is soft and white, and produces flour with a low gluten content. Its particularly valuable quality for this country is its earliness in ripening, although it is usually rather rust-resistant (at least in Australia) and fairly drought-resistant. It is adapted to the Southern States, but might also be tried in Oregon, northern California, and southeastern Washington. It is a winter variety in mild climates.

5076. TRITICUM VULGARE. **Wheat.**

From New South Wales, Australia. Received May 8, 1900.

Steinwedel. This is a winter variety for mild climates. It has bald heads, soft, white grains, and produces a weak flour of fair gluten content. It is particularly resistant to drought, and ripens early; is adapted to our Southern States, but may well be tried in our Pacific coast States. It is not considered a good milling wheat in Australia.

5077. TRITICUM VULGARE. **Wheat.**

From New South Wales, Australia. Received May 8, 1900.

Canning Downs. This variety is a wheat of short growth, with bearded heads. It ripens very early, and possesses a fair quality of grain, but is not hardy. It is adapted for trial in the Southern States west to Texas, and, because of its early maturity, should be tested in Oregon and southeastern Washington.

5078. TRITICUM VULGARE. **Wheat.**

From New South Wales, Australia. Received May, 8, 1900.

Early Baart. This is an early-ripening variety, adapted to the Pacific States. It is a winter variety in mild climates.

5079. TRITICUM VULGARE. **Wheat.**

From New South Wales, Australia. Received May 8, 1900.

King's Early. This is a winter variety for mild climates. It produces a rather soft grain and is very early in ripening. It is adapted to the Southern States, and may well be tried in the Pacific coast States.

5080. BROMUS UNIOLOIDES. **Rescue grass.**

From New South Wales, Australia. Received May 8, 1900.

This grass is a native of South America, and possibly also of the southwestern United States. Distributed.

5081. PASPALUM DILATATUM. **Large water grass.**

From New South Wales, Australia. Received May 8, 1900.

A rather coarse-leaved perennial, growing in clumps 2 to 5 feet high, bearing near the summit of the stems 2 to 10 more or less spreading racemes or spikes of crowded, hairy spikelets. Although a native of Brazil, it has now become quite largely introduced throughout the United States.

5082. ATRIPLEX NUMMULARIA. **Round-leaved saltbush.**

From New South Wales, Australia. Received May 8, 1900.

This plant attains a height of from 6 to 10 feet and is highly valued as forage for cattle and sheep. Although it is extensively planted and highly valued in central Australia and South Africa, the experiments with it in this country have not been satisfactory.

5083. ATRIPLEX HALIMOIDES. **Mealy saltbush.**

From New South Wales, Australia. Received May 8, 1900.

A low-growing, shrubby perennial about 1 foot high, with variable, ovate-lanceolate leaves, which are covered with whitish, dust-like scales. It is a native of the Central regions of Australia, where it makes a very rapid growth and begins to bear seeds in three months after sowing. In this country it has not been sufficiently experimented with to state its possibilities.

5084. POA PRATENSIS. **Kentucky blue grass.**

From New York. Received May 5, 1900. Distributed.

5085–5105. CAPSICUM ANNUUM. **Red pepper.**

From British Guiana. Received May 14, 1900. Presented by the Director of the Botanic Gardens. A collection of different varieties, of which but two are named or described:

5085. (1.) Distributed.
5086. (2.) Distributed.
5087. (3.) Distributed.
5088. (4.) Distributed.
5089. (5.) Distributed.
5090. (6.) Distributed.
5091. (7.) Distributed.
5092. (8.) Distributed.
5093. (9.) Distributed.
5094. (10.) Distributed.
5095. (11.) Distributed.
5096. (12.) Distributed.
5097. (13.) Distributed.
5098. (14.) Distributed.
5099. (15.) Distributed.
5100. (16.) Distributed.
5101. (17.) Distributed.
5102. (18.) Distributed.
5103. (19.) Distributed.
5104. (20.) *Killmissy.* Distributed.
5105. (21.) Black when young, yellow when ripe.

5106. CAPSICUM FRUTESCENS BACCATUM. **Bird pepper.**

See Nos. 5085–5105. Distributed.

5107. HUMULUS LUPULUS. **Hop.**

From Bohemia. Received through Messrs. Lathrop and Fairchild (No. 252), May 15, 1900.

Red Semsch. A variety, originated in Auscha, which has been improved by being grown two years on the red soils of Saaz, the most noted hop region of Bohemia. (See Circular No. 19, Division of Botany.) Distributed.

5108. HUMULUS LUPULUS. **Hop.**

From Bohemia. Received through Messrs. Lathrop and Fairchild (No. 255), May 15, 1900.

The true Saaz hop, less fruitful than Auscha, but with the finest aroma and bitter taste. (See Circular No. 19, Division of Botany.) Distributed.

5109. FICUS CARICA. **Caprifig.**

From Algiers, Algeria. Received through Mr. Walter T. Swingle (No. 1), May 16, 1900. Presented by Dr. Trabut.

From Jardin d'Essai. Distributed.

5110. OLEA EUROPÆA. **Olive.**

From Algiers, Algeria. Received through Mr. Walter T. Swingle (No. 4), May 17, 1900. Presented by Dr. Trabut.

Olive longue de Constantine. "A very large pickling olive of very superior quality, from the Jardin du Hamma, at Constantine." (*Swingle.*) Distributed.

5111. Olea europæa. **Olive.**

From Algiers, Algeria. Received through Mr. Walter T. Swingle (No. 5), May 17, 1900.

Round Constantine. Distributed.

5112. Carica papaya. **Papaw.**

From Honduras. Presented by Dr. R. Fritzgartner, Director of the Mint, Tegucigalpa. Received May 17, 1900.

Large, yellow fruit. Distributed.

5113. Ficus carica. **Caprifig.**

From Algiers, Algeria. Received through Mr. W. T. Swingle, May 17, 1900. Distributed.

5114. Nicotiana tabacum. **Tobacco.**

From Japan. Received May 17, 1900. Presented to Hon. James Wilson, Secretary of Agriculture, by C. Maki, Director of the Ibraki Prefecture of the Ota Tobacco Monopoly.

Kokubu. "The best tobacco produced in this district. The aromatic leaves are excellent and grade first in Japan." (*Maki.*)

5115–5122.

From Sinaloa, Mexico. A collection of seed presented by Mr. G. Lawton Taylor, of Santa Cruz de Alaya, through the Office of Experiment Stations, May 21, 1900.

5115. Carica papaya. **Papaw.**

Papai. A tree about 20 feet high; fruit excellent. Distributed.

5116. Carica papaya. **Papaw.**

Papai. From Oahu, H. I. "Extremely productive and excellent eaten green, cooked as vegetables, or ripe as fruit." (*Taylor.*) Distributed.

5117. Brassica juncea. **Chinese mustard.**

Koytoi. "From Asia. Eaten cooked as greens and also made into a sauerkraut." (*Taylor.*) Distributed.

5118. Vigna catjang. **Cowpea.**

Aukok. "A long, black climbing bean from Asia. Eaten as snap beans. Very tender even when old." (*Taylor.*) Distributed.

5119. Cucurbita pepo. **Squash.**

Umqua. "A Chinese squash, weighing about 30 to 40 pounds. The squash looks much like a watermelon, but is hollow and will keep a year if not frozen, pieces being cut off and cooked as vegetables." (*Taylor.*) Distributed.

5120. Citrullus vulgaris. **Citron.**

Tequa. "From Asia. Is like the *Umqua* in appearance and weight, but keeps only four months." (*Taylor.*) Distributed.

5121. Momordica charantia. **Gourd.**

Laqua. "A climber. Fruit looks like a large gherkin. Is cooked with roast meats. Acid fruit weighs about three-fourths of a pound." (*Taylor.*) Distributed.

5122. Luffa acutangula. **Gourd.**

Suqua. "From China. A delightful cornucopia-shaped, 10-ribbed vegetable, climber, from 1 to 2½ feet long. Is good raw or cooked. Looks like black watermelon seed." (*Taylor.*) Distributed.

5123. FICUS CARICA. **Caprifig.**

From Algeria. Received through Mr. W. T. Swingle (No. 3), May 21, 1900. Distributed.

5124. CITRUS LIMONUM. **Lemon.**

From Banda, Dutch East Indies. Received through Messrs. Lathrop and Fairchild (No. 350), May 22, 1900.

Sauerbier. A very large, thin-skinned, exceedingly juicy lemon of good flavor. Distributed.

5125. STIPA LEUCOTRICHA. **Bearded mesquite.**

From Victoria, Tex. Presented by Hon. J. D. Mitchell, May 21, 1900.

This is the best hay grass of the "sedge-grass prairies" of southern Texas. It is a bunchy grass with long and abundant leaves, and grows 3 to 4 feet high.

5126. RUMEX HYMENOSEPALUS. **Canaigre.**

From San Antonio, N. Mex. Received March 1, 1900. Presented by Mr. C. B. Allaire.

A few seeds from a plant selected for its high tannin content. Distributed.

5127. CUCUMIS MELO. **Muskmelon.**

From Turkey. Received May 24, 1900, through Mr. H. S. D. Ashby, Smithfield, Tex.

"A few seeds sent by Judge A. Terrell from Constantinople. Said to be a very fine melon of delicate flavor." (*Ashby.*)

5128. CARAGANA FRUTESCENS. **Siberian pea tree.**

From Russia. Received through Prof. N. E. Hansen, March, 1898.

5129. RUBUS XANTHOCARPUS. **Raspberry.**

From North China. Received through Prof. N. E. Hansen, March, 1898.

Orange-fruited raspberry. From mountains of North China. Fruit large; peculiar, pleasant flavor; semirecumbent habit. Hardy at St. Petersburg. Cultivated in ordinary way. Likely to become a bad weed. Should be watched.

5130–5138.

From Russia. Received through Prof. N. E. Hansen, March, 1898. A collection of seeds as follows:

5130. ROSA RUGOSA (No. 600.)

5131. NEILLIA AMURENSIS. (No. 602.) Distributed.

5132. LONICERA CHRYSANTHA. (No. 603.)

5133. CLEMATIS ALPINA. (No. 606.)

5134. RUBUS ARCTICUS. (No. 607.) Distributed.

5135. LONICERA ALBERTI. (No. 608.)

5136. LONICERA CÆRULEA DEPENDENS. (No. 609.)

5137. ROSA RUGOSA ALBA. (No. 610.)

5138. CARAGANA FRUTESCENS GRANDIFLORA. (No. 611.)

5139. AVENA SATIVA. **Oat.**

From Kiovikko, Finland. Received through Messrs. Lathrop and Fairchild (No. 433), September 28, 1900.

North Finnish Black. "The climate of Kiovikko is extremely cold. During the winter of 1899–1900 the temperature remained for nearly three weeks at from —4° F.

to —40° F., reaching an extreme minimum of —49° F. Frosts often occur every month during the summer. Seed is sown here in April and May. The harvest occurs at the end of August. This seed was grown at the Finnish Agricultural School of Kiovikko. It matures earlier than any other sort." (*Fairchild.*)

5140. AVENA SATIVA. **Oat.**

From Kiovikko, Finland. Received through Messrs. Lathrop and Fairchild, September 28, 1900.

A white oat which was mixed with No. 5139.

5141. PINUS SILVESTRIS. **Scottish pine.**

From Jokkis, Finland. Received through Messrs. Lathrop and Fairchild (No. 434), September 28, 1900.

5142. PROSOPIS HORRIDA. **Algaroba.**

From Rosario, Argentina. Received September 28, 1900. Presented by Hon. James M. Ayers, United States consul.

"The pods of this tree, which resembles the Mesquite bean of Texas, are extensively used for feeding cattle and for food by the common people. It grows luxuriantly in very dry regions." (*Fairchild.*)

5143. DIOSPYROS TEXENSIS. **Texas ebony.**

From Victoria, Tex. Presented by Mr. E. H. Smith. Received October 1, 1900.

5144. MENTHA PIPERITA. **Peppermint.**

From Hungary. Received October 2, 1900.

5145. TRITICUM VULGARE. **Wheat.**

From Columbia, Mo. Received September 29, 1900.

Fultz. Wheat grown by the Missouri Agricultural Experiment Station.

5146. VICIA CRACCA. **Vetch.**

From Luleå, Sweden. Received through Messrs. Lathrop and Fairchild (No. 437a), October 4, 1900.

5147. VICIA FABA. **Horse bean.**

From Freemansburg, Pa. Presented by Mr. J. H. Denyer. Received October 5, 1900.

(See No. 3997, Inventory No. 8.)

5148. VICIA FABA. **Horse bean.**

From Freemansburg, Pa. Presented by Mr. J. H. Denyer. Received October 5, 1900.

(See No. 3997, Inventory No. 8.)

5149. HICORIA PECAN. **Pecan.**

From Victoria, Tex. Presented by Mr. E. H. Smith. Received October 15, 1900.

5150. TRITICUM VULGARE. **Wheat.**

From Japan. Received May 26, 1900. Presented by Prof. Setsuschuro Tanaka, Agricultural College, Komaba, Tokyo.

Onigara. "Produced in Owada in the Prefecture Scitama, several miles from Tokyo, a region noted for its wheat production."

5151. HIBISCUS SABDARIFFA. **Roselle.**

From Topolobampo, Mexico. Received May 31, 1900. Presented by Mr. A. J. Wilber.

Roselle is used for various culinary purposes; the leaves as greens; the fleshy calyxes for sauces, salads, etc. The dried calyxes are the roselles of commerce.

5152. HALOXYLON AMMODENDRON.

From Russia. Received May 31, 1900. Presented by the Secretary for Agriculture and Mines, Department of Agriculture, St. Petersburg.

Black.

5153. HALOXYLON AMMODENDRON.

From Russia. Received May 31, 1900. Presented by the Secretary for Agriculture and Mines, Department of Agriculture, St. Petersburg.

White.

5154. CAPSICUM ANNUUM. **Red pepper.**

From Surabaya, Java. Received through Messrs. Lathrop and Fairchild (No. 391), June 1, 1900.

"Long red pepper, very silky skinned, three-eighths of an inch in diameter, from the market of Surabaya." (*Fairchild.*)

5155. SOLANUM.

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 392), June 1, 1900.

"Seed from single fruit of ornamental shrubby species of *Solanum*, grown in pots in the 'City of the Dead' at Canton. The showy fruits are of an exceedingly deep, rich red color. Plant more or less spiny; 1 foot high; should be grown as a pot plant. (*Fairchild.*)

5156. SOLANUM.

From Canton, China. Received through Messrs. Lathrop and Fairchild (No. 393), June 1, 1900.

"A thorny shrub 2 feet high, grown in pots as an ornamental. The lemon-yellow fruits are distinguished by small manifold enlargements around the base, giving it a most peculiar appearance. Are egg-shaped, 2 or 3 inches long. From the 'City of the Dead' in Canton." (*Fairchild.*)

5157. QUERCUS CORNEA. **Oak.**

From Hongkong, China. Received through Messrs. Lathrop and Fairchild (No. 394), June 1, 1900.

"An edible acorn grown in Hongkong. Tons of this acorn are consumed. It is as sweet as a chestnut and has a flavor which is very agreeable. It deserves serious consideration." (*Fairchild.*)

5158. SCIRPUS TUBEROSA. **Water chestnut.**

From Hongkong, China. Received through Messrs. Lathrop and Fairchild No. 395), June 1, 1900.

"One of the most interesting aquatic vegetables in China. Has been introduced into California by the Chinese. (See reports of California Experiment Station.)" (*Fairchild.*)

5159. ANDROPOGON SORGHUM. **Broom corn.**

From Batavia, Java. Received through Messrs. Lathrop and Fairchild (No. 396), June 1, 1900.

"Red variety, used as an ornamental grass in Batavia. (*Fairchild.*)

5160. TERMINALIA CHEBULA. **Myrobalan.**

From Canton, China. Received through Messrs. Lathrop and Fairchild, June 1, 1900.

"A nut, of which the epicarp is used for a black dye. I am told that this is the *Myrobalan* of India, which is used in large quantities for tanning purposes in the very extensive boot and shoe factories of Cawnpore. Deserves to be looked up. From market in Canton, China. These samples will not grow." (*Fairchild.*)

5161. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild, June 1, 1900.

Grown in Whampoa, near Canton. Distributed.

5162. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild, June 1, 1900.

"This variety is the highest-priced rice in Canton." (*Fairchild.*) Distributed.

5163. ORYZA SATIVA. **Rice.**

From Canton, China. Received through Messrs. Lathrop and Fairchild, June 1 1900.

"Variety grown everywhere about Canton. The common sort." (*Fairchild.*) Distributed.

5164. ORYZA SATIVA. **Rice.**

From Saikong, China. Received through Messrs. Lathrop and Fairchild, June 1, 1900.

"This variety is imported into Canton." (*Fairchild.*) Distributed.

5165. ORYZA SATIVA. **Rice.**

From Bangkok, Siam. Received through Messrs. Lathrop and Fairchild (No. 397), June 1, 1900.

Royal Caw Hluang. "From the private paddy field of the King of Siam. Said to be of superior quality." (*Fairchild.*)

5166. ORYZA SATIVA. **Rice.**

From Bangkok, Siam. Received through Messrs. Lathrop and Fairchild (No. 398), June 1, 1900.

Nasuan. "The largest-kerneled rice in Siam." (*Fairchild.*) Distributed.

5167. PIPER NIGRUM. **Pepper.**

From Bangkok, Siam. Received through Messrs. Lathrop and Fairchild (No. 399), June 1, 1900.

"A variety of white pepper said to be grown exclusively for the table of the King of Siam." (*Fairchild.*)

5168. AVENA SATIVA. **Oat.**

From Proskurow, Russia. Presented by Dr. S. de Mrozinski.

An early oat which ripens within 75 days from the seed. Distributed.

5169. MUSA ABYSSINICA. **Banana.**

From Santa Ana, Cal. Received through Mr. W. T. Swingle, June 1, 1900.

A flowering banana with seeds as large as cacao beans.

5170. VITIS ROTUNDIFOLIA. **Grape.**

From Clarcona, Fla. Presented by Mr. H. Meislahn.

Scuppernong.

5171. VITIS ROTUNDIFOLIA. **Grape.**

From Clarcona, Fla. Presented by Mr. H. Meislahn.

Thomas.

5172. PTÆROXYLON UTILE. **Sneezewood.**

From South Africa. Presented by Hon. A. D. Heywood, Conservator of Forests, Umtata, Cape of Good Hope.

"This tree supplies one of the most durable of South African timbers. Very hard and difficult to work, but valuable for fence posts. Splits easily and burns well." (*Von Mueller.*)

5173. GUAIACUM OFFICINALE. **Lignum-vitæ.**

From Jamaica. Received through Mr. D. G. Fairchild, from the Director, Botanical Department.

"Tree, attaining middle size, but of slow growth. Yields a heavy, diagonally fibrous, somewhat odorous, greenish *lignum-vitæ*, which is unique in its qualities and much sought for pulley blocks, rulers, etc. The resin is used medicinally and for chemical tests." (*Von Mueller.*)

5174. TRIFOLIUM JOHNSONI. **Clover.**

From British East Africa. Presented by the Director of the Royal Botanic Gardens, Kew, England, through the U. S. National Museum.

Seeds of the white clover of the rich, short pastures in the Kiluyu district, at an elevation of 6,500 feet. It is greedily devoured by all sorts of stock and will probably prove most useful in tropical and subtropical countries. Distributed.

5175. GOSSYPIUM BARBADENSE. **Egyptian cotton.**

From Egypt.

5176. ISOPOGON DAWSONI. **Isopogon.**

From New South Wales, Australia. Presented by Mr. R. P. Baker, Curator of the Technological Museum, Sydney.

"A new species of this genus recently described in the Proc. Linn. Soc. N. S. W. It is the tallest of any of the *Isopogons* occurring in eastern Australia. The flowers are more showy than those of other species of the genus." (*Baker.*)

5177. ACTINOTUS HELIANTHUS. **Flannel flower.**

From New South Wales, Australia. Presented by Mr. R. T. Baker, Curator of the Technological Museum, Sydney.

"This is one of the favorite wild flowers of Sydney and at first sight would be taken for a composite, the large, white involucral bracts resembling the ray florets of a composite. It much resembles the *edelweiss* of the Swiss Alps. Grows in poor, sandy, rocky soil." (*Baker.*)

5178. LENS ESCULENTA. **Lentil.**

From Leitmeritz, Bohemia. Received through Messrs. Lathrop and Fairchild, September, 1899.

"Samples of lentils from Leitmeritz, the noted lentil region of Bohemia." (*Fairchild.*)

5179. CUCUMIS METULIFERUS. **African horned cucumber.**

From Avonpark, Fla. Presented by Mr. S. G. Donaldson.

5180. CUCUMIS MELO. **Muskmelon.**

From San Juan, P. R. Presented by Capt. H. R. Lemly, U. S. A., June, 1899.

Valencia. "This melon will keep several months if cut from the vine before fully ripe. It is green in color when ripe and of very fine flavor." (*Lemly.*)

5181. PINUS. **Pine.**

From Russia. Received through Mr. M. A. Carleton, December, 1899.

A pine with edible seeds as large as a coffee berry.

5182. AVENA SATIVA. **Oat.**

From Russia. Received through Mr. M. A. Carleton, 1899.

5183. PAPAVER SOMNIFERUM. **Poppy.**

From Russia. Received through Mr. M. A. Carleton, 1899.

5184. HORDEUM VULGARE. **Barley.**

From Russia. Received through Mr. M. A. Carleton, 1899.

Best for beer-brewing purposes.

5185. SECALE CEREALE. **Rye.**

From Russia. Received through Mr. M. A. Carleton, 1899.

5186. CITRULLUS VULGARIS. **Watermelon.**

From Prim, Ark. Received from Mr. F. P. Hynds, December 14, 1899.

"This melon is a rank grower of surpassing sweetness." (*Hynds.*)

5187. BASELLA RUBRA. **Malabar nightshade.**

From Buenos Ayres, Argentina. Received through Messrs. Lathrop and Fairchild, 1899.

"A very vigorous salad vine; grows over low trellises and forms dense masses of thick, succulent leaves of very crisp texture. These leaves are cooked and make an excellent salad or greens. Introduced into Argentina by General Roca, President of the Republic." (*Fairchild.*)

5188. CASTILLOA ELASTICA. **Rubber.**

From Port Limon, Costa Rica. Presented by Mr. F. C. Nicholas, June 18, 1900.

A lofty forest tree of the bread-fruit family, native of America. Lately introduced into Ceylon and some parts of India. It has been found easy to grow this tree from cuttings and it does well on slopes of hills. Distributed.

5189–5216.

From Manila, P. I. A collection of seeds secured by Lieut. A. P. Hayne, California Heavy Artillery, U. S. V., and Mr. Jeremiah Rebmann, private, Company B, First Nebraska Volunteers, while serving under an honorary commission from the Secretary of Agriculture, during the period from January 7, 1899, to July 1, 1899. The seeds were received January 15, 1900.

5189. Distributed.

5190. CINNAMOMUM.

"An ornamental shrub with very fragrant flowers. Common in Manila." (*Rebmann.*)

5191. CARICA PAPAYA. **Papaw.**

"This is the papaw of the tropics, producing a fine, edible fruit. Common in the Philippines." (*Rebmann.*)

5189–5216—Continued.

5192. MIRABILIS.

"A little herbaceous flowering plant cultivated in gardens as an ornamental. Common in Manila." (*Rebmann.*)

5193. CÆSALPINIA PULCHERRIMA.

Tagal name, *Caballero* or *Tilor de fuego.*

5194. ARECA CATECHU. **Betel nut.**

Tagal name, *Bonga.*

5195. CALOPHYLLUM INOPHYLLUM.

Tagal name, *Palo María.*

5196. ALBIZZIA PROCERA.

Tagal name, *Acle.*

5197. CEIBA. **Cotton tree.**

Tagal name, *Taglinao.*

5198. TERMINALIA LATIFOLIA.

Tagal name, *Talisay.*

5199. GOSSYPIUM. **Cotton.**

Tagal name, *Bulacana muti.*

5200. MIMOSA.

Tagal name, *Ipil.*

5201. ACHRAS SAPOTA. **Sapodillo.**

Tagal name, *Chico.* This tree is an evergreen with dark-green, shining leaves. The fruit is about the size of a hen's egg and much of the same shape, dark-brown, with a mealy surface. It is eaten to a limited extent by the natives.

5202. ANACARDIUM OCCIDENTALE. **Cashew nut.**

Tagal name, *Cassoy.* A tree 30 to 40 feet high. The gum, sap, bark, and seed are all employed either for dyeing, tanning, or medicine. The fruit is eaten by the natives and the wood used for packing cases, boat building, and charcoal.

5203. ACACIA FARNESIANA. **Cassie.**

Tagal name, *Aroma.* (See No. 3349, Inventory No. 7; and No. 3528, Inventory No. 8.)

5204. CANANGA ODORATA. **Ilang-ilang.**

Tagal name, *Ilang-ilang.* (See No. 3793, Inventory No. 8.)

5205. SANDORICUM INDICUM. **Sandal tree.**

Tagal name, *Santol.* This evergreen glabrous tree is a native of the Moluccas and extensively cultivated in the tropics. Leaves trifoliate and numerous; flowers yellow, sparse, and glomerate. The apple-shaped fruit is fleshy, acid, and edible.

5206. SPONDIAS DULCIS. **Ciruela.**

Tagal name, *Sirihuelas.* A tree from 50 to 60 feet high. The deep-amber colored fruit is egg-shaped, measures a foot in circumference, and weighs 1 or more pounds. The rind tastes of turpentine, but the pulp has an apple-like smell and an agreeable flavor.

5189–5216—Continued.

5207. Poinciana regia. **Royal poinciana.**

Tagal name, *Árbol de fuego* (fire tree). This is a beautiful ornamental tree. It is especially desirable for streets and parks. (See No. 808, Inventory No. 1.)

5208. Caryota urens. **Fish-tail palm.**

One of the finest ornamental palm trees. It is one of the hardiest varieties known, growing in the Himalayas at an altitude of 5,000 feet. Some claim that it will grow at an altitude of 7,500 feet, where the temperature sometimes approaches the freezing point.

5209. Sesbania grandiflora.

Tagal name, *Caturay.* Called in Australia the corkwood tree. Valuable for various purposes. The red-flowered variety is very ornamental. The fruit sometimes attains a length of 3 feet.

5210. Anona reticulata. **Custard apple.**

Tagal name, *Anonas.* A small tree, the leaves of which are used in dyeing and tanning, the bark for medicine and fiber, and the fruit as a food. The timber also has commercial value.

5211. Sterculia helicteres.

Tagal name, *Dungan.* (See No. 3804, Inventory No. 8.) Distributed.

5212. Acacia.

Tagal name, *Acacia.*

5213. Tabernæmontana pandacaqui. Distributed.

5214. Artabotrys odoratissimus.

Tagal name, *Ilang-ilang de China.*

5215. Poinciana regia. **Royal poinciana.**

Tagal name, *Árbol de fuego.* (See No. 5207.)

5216. Citrus decumana. **Pomelo.**

Tagal name, *Naranja.* Red-fleshed. Bears fruit throughout the year. (See No. 3409, Inventory No. 8.)

5217. Cola acuminata. **Kola nut.**

From Jamaica. Received June 30, 1900.

An African tree growing to a height of from 30 to 60 feet and containing many valuable properties. The plant resembles the chestnut, and is especially adapted to low, damp lands, but can be grown at an altitude of 1,000 feet. It is easily cultivated and yields a large crop twice a year. It begins to fruit when 4 or 5 years old. The large trees bear flowers and fruit at the same time. The nut is used in making a beverage which is considered by some to be superior to coffee or cocoa. Distributed.

5218. Asparagus horridus.

From Algeria. Received through Mr. W. T. Swingle, June 30, 1900.

A wild species considered by some to be superior to the best cultivated asparagus. Distributed.

5219. Carica papaya. **Papaw.**

From Mexico. Presented by Mr. J. Lawton Taylor, of Santa Cruz de Alaya, Sinaloa, June 30, 1900.

Hawaiian. "An immensely productive variety. It bears crops several times during the year." (*Taylor.*)

5220. CARICA PAPAYA. **Papaw.**

From Mexico. Presented by Mr. J. Lawton Taylor, of Santa Cruz de Alaya, Sinaloa, June 30, 1900.

Mexican. "This tree bears only one crop of fruit during the season." (*Taylor.*)

5221. LUFFA ACUTANGULA. **Gourd.**

From Mexico. Presented by Mr. J. Lawton Taylor, of Santa Cruz de Alaya, Sinaloa, June 30, 1900.

Suqua. "A native of Asia. Eaten cooked as a vegetable or raw." (*Taylor.*) (See No. 5122.)

5222. VIGNA CATJANG. **Cowpea.**

From Mexico. Presented by Mr. J. Lawton Taylor, of Santa Cruz de Alaya, Sinaloa, June 30, 1900.

Ankok. "A black climbing bean, a native of Asia. It makes a good arbor for grapes. The pods grow here to a length of 40 inches. They are tender and are eaten like string beans." (*Taylor.*) (See No. 5118.)

5223. MOMORDICA CHARANTIA. **Gourd.**

From Mexico. Presented by Mr. J. Lawton Taylor, of Santa Cruz de Alaya, Sinaloa, June 30, 1900.

Laqua. "A kind of gherkin, cooked with roast meat." (*Taylor.*) (See No. 5121.)

5224. PHŒNIX DACTYLIFERA. **Date.**

From Cora, near Biskra, Algeria. Received through Mr. W. T. Swingle (No. 2), July 2, 1900.

Ksiba.

5225–5341. PHŒNIX DACTYLIFERA. **Date.**

A collection of date palms obtained by Mr. W. T. Swingle in northern Africa, to be described in a separate publication.

5342. TRITICUM VULGARE. **Wheat.**

From Tokyo, Japan. Received July 5, 1900.

Onigara. An early ripening, soft, bearded wheat, rather hardy, and with a fair gluten content. Is of yellowish-green color in the autumn. Grain of medium size, light-brown; straw tall, erect; a fair stooler

5343. TRITICUM VULGARE. **Wheat.**

From Tokyo, Japan. Received July 5, 1900.

Yemide. An early-ripening, bearded winter wheat with very large, coarse, erect straw. Grain of medium size, soft, and light-brown in color.

5344. CRYPTOMERIA JAPONICA. **Cryptomeria.**

From Yokohama, Japan. Received July 5, 1900.

A very beautiful Japanese evergreen. Distributed.

5345. BAMBUSA. **Bamboo.**

From Yokohama, Japan. Received July 5, 1900.

Matake. Distributed.

5346. BAMBUSA. **Bamboo.**

From Yokohama, Japan. Received July 5, 1900.

Moso. Distributed.

5347. ERIOBOTRYA JAPONICA. **Loquat.**

From Italy. Received July 5, 1900. (See Nos. 4566 and 4567.) Distributed.

5348. BROMUS UNIOLOIDES RUPESTRIS. **Rescue grass.**

From La Plata, Argentina. Received through Messrs. Lathrop and Fairchild, July 14, 1900. Presented by Dr. Carlos Spegazzini. Distributed.

5349. LOLIUM BRASILIANUM. **Rye grass.**

From La Plata, Argentina. Received through Messrs. Lathrop and Fairchild, July 14, 1900. Presented by Dr. Carlos Spegazzini. Distributed.

5350. CEREUS CHALIBÆUS.

From La Plata, Argentina. Received through Messrs. Lathrop and Fairchild, July 14, 1900. Presented by Dr. Carlos Spegazzini. (See No. 3424, Inventory No. 8.)

5351–5355. TRITICUM DURUM. **Wheat.**

From Marseille, France. Received through Mr. W. T. Swingle, July 18, 1900.

"These five numbers comprise a collection of the different types of macaroni wheat for sale at the Marseille stock exchange June 17, 1900. They were procured through the kindness of Dr. Bendit after consultation with many of the wheat brokers and millers of Marseille." (*Swingle.*)

5351. BERDEANSKA.

5352. NOVOROSSISK.

5353. ALGERIAN.

5354. ARGENTINE.

5355. TAGANROG.

5356. RAPHANUS SATIVUS. **Radish.**

From Kagoshima, Japan. Presented by Mr. T. Okohira, of the Japanese Legation. Received July 16, 1900.

Daikon. (See No. 3876, Inventory No. 8.)

5357–5359. ARACHIS HYPOGÆA. **Peanut.**

From Marseille, France. Received through Mr. W. T. Swingle, July 28, 1900.

A collection of the best oil varieties of peanuts, purchased in the Marseille market by the United States consul. They are as follows:

5357. From Senegal.

5358. *Gambia.*

5359. *Coromandel.*

5360. PHORMIUM TENAX EGMONTIANA. **New Zealand flax.**

From New Brighton, Canterbury, New Zealand. Received July 30, 1900. Presented by Mr. L. Cockayne.

The brown or purple leaved New Zealand flax. Distributed.

5361. PHORMIUM COOKIANUS. **New Zealand flax.**

From New Brighton, Canterbury, New Zealand. Received July 30, 1900. Presented by Mr. L. Cockayne.

A form growing on limestone rocks at sea level. Distributed.

5362. ORYZA SATIVA. **Rice.**

From Java. Received through Messrs. Lathrop and Fairchild, July 30, 1900.

A small sample of the most noted Javan rice, the *Indra Mayoe*, secured from the Holland exhibit at the Paris Exposition, 1900. Distributed.

5363. CUCURBITA MAXIMA. **Pumpkin.**

From Forestburg, S. Dak. Received August 2, 1900. Presented by Hon. H. C. Warner.

Hungarian honey. Seed grown at Forestburg two years from the original No. 14, Inventory No. 1, imported by Prof. N. E. Hansen.

5364. ATRIPLEX NUMMULARIA. **Old man saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900. (See No. 5082.)

5365. ATRIPLEX HALIMOIDES. **Saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900. (See No. 5083.)

5366. ATRIPLEX LEPTOCARPA. **Saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

A much-branched trailing perennial. The whole plant is covered with glaucous bloom. The leaves are very variable in shape, but mostly oblong, and from 1 to 2 inches in length. The fruit is small, narrow, cylindrical, and prominently two-pointed at the apex. This species was introduced into California in 1891 and has become widely distributed. (See Farmers' Bulletin No. 108.) Distributed.

5367. ATRIPLEX ANGULATA. **Saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

"A dwarf shrubby plant with spreading branches more or less covered with a mealy whiteness. It withstands very dry weather, is easily cultivated, and makes a valuable hay for feeding stock. The seeds should be sown in early autumn, after a rainfall." (*Turner.*) Distributed.

5368. ATRIPLEX VESICARIA. **Bladder saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

An erect, bushy shrub, 18 inches to 2 feet high, and covered with a white, scaly dust. The leaves are about three-fourths of an inch long and oblong in shape. The fruit is membranous, with large, inflated, angled, bladder-like appendages on each side, hence the name "bladder saltbush." In Australia this species is considered one of the most valuable forage plants, because of the abundance of seed which it produces and the ease with which the seeds are spread about. It withstands the utmost extremes of drought. (See Farmers' Bulletin No. 108.)

5369. ATRIPLEX LEPTOCARPA. **Saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900. Distributed.

(See No. 5366.)

5370. ASTREBLA TRITICOIDES. **Mitchell grass.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock August 3, 1900.

A perennial grass found on rich soils.

5371. ASTREBLA PECTINATA. **Mitchell grass.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

This is one of the famous Mitchell grasses and is regarded by some as the best of all native grasses, both for its drought enduring qualities and for its fattening properties. Distributed.

5372. ERAGROSTIS PILOSA. **Love grass.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

This grass is common in the warm and temperate regions of the northern hemisphere, chiefly in the Old World. When conditions are favorable it grows about 3 feet high. It reproduces itself from falling seeds and often grows during the entire winter. Little attention is required in its cultivation. Distributed.

5373. DIPLACHNE FUSCA. **Swamp grass.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

This annual grass grows plentifully in damp and swampy places and is worth cultivating on low-lying waste lands. It makes desirable hay and ensilage. The plant produces an abundance of seeds which ripen late in the winter.

5374. ENCHYLÆNA TOMENTOSA. **Barrier saltbush.**

From Coolabah, New South Wales. Presented by Mr. R. W. Peacock, August 3, 1900.

This procumbent or divaricately branched undershrub has been cultivated for many years and produces seed nearly all the year round, but more abundantly in the summer months. Owing to its free seeding and the easy germination of its seed, it grows quite plentifully. Sheep feed greedily on this shrub. The seeds should be sown during the early autumn months, after a rainfall, if possible. Distributed.

5375. CHÆTOCHLOA.

From Roebourne, West Australia. Presented by Mr. W. D. Cusack, August 3, 1900.

An annual grass affording good feed.

5376. CYDONIA SINENSIS. **Chinese quince.**

From Washington, D. C. Presented by Mr. Henry F. Blount, August 10, 1900.

5377. CASTILLOA ELASTICA. **Rubber.**

From Managua, Nicaragua. Received August 10, 1900. Distributed.

5378. LACTUCA ACUMINATA. **Wild lettuce.**

From Kerrsville, Tex. Presented by Mr. E. K. Carr, August 13, 1900.

"This plant grows wild in sheltered places and will endure a temperature of zero, Fahrenheit. Never known by oldest settlers to be cultivated. It commences to grow with the fall rains and makes an excellent winter salad, being free from a bitter taste. It is eaten greedily by cattle. Is never found on open ranges." (*Carr.*) Distributed.

5379. ASTRAGALUS CRASSICARPA. **Ground plum.**

From Kerrsville, Tex. Presented by Mr. E. K. Carr, August 13, 1900.

This is a perennial legume, which grows throughout the entire prairie region. It is well known on account of its fleshy plums or pods, which are produced in the greatest abundance during the early spring months. The forage is rich and is relished by all kinds of stock. There are several closely related species, which are all equally useful, and an effort should be made to prevent their complete extermination, at least until something equally good is found to take their places. Distributed.

5380. TRITICUM DURUM. **Wheat.**

From Mustapha-Alger, Algeria. Received through Mr. W. T. Swingle, August 14, 1900.

Pellissier.

5381. HEVEA PAUCIFLORA. **Rubber.**

From Georgetown, British Guiana. Presented by Prof. J. B. Harrison, through Dr. H. W. Wiley, Chemist. Received August 15, 1900. Distributed.

5382. HEVEA CONFUSA. **Rubber.**

From Georgetown, British Guiana. Presented by Prof. J. B. Harrison, through Dr. H. W. Wiley, Chemist. Received August 15, 1900. Distributed.

5383. PHYSALIS VIOLACEA.

From Los Angeles, Cal. Presented by Mr. Elmer Stearns, August 24, 1900.

"Various species of Physalis are always to be seen in the Mexican markets. The fruits are called 'tomatoes' and are used to make a dressing for meats, etc., or are combined with red peppers to make a chili sauce." (*Rose.*) Distributed.

5384-5392.

From Mount Lindhurst, South Australia. Received August 28, 1900.

A collection of seeds of some of the native forage plants of this region, secured by Mr. Max Koch.

5384. CLIANTHUS DAMPIERI. **Sturt's desert pea.**

5385. ACACIA CIBARIA. Distributed. **Mulga.**

5386. POLYCALYMNIA STURTII.

5387. LAVATERA PLEBEIA. **Marshmallow.**

5388. TRIGONELLA SUAVISSIMA. **Scented clover.**

5389. ERODIUM CYGNORUM. **Geranium.**

5390. GOSSYPIUM STURTII.

5391. HELIPTERUM POLYGALIFOLIUM.

5392. KOCHIA SEDIFOLIA. **Bluebush.**

5393. NICOTIANA TABACUM. **Tobacco.**

From Cuba. Received August 23, 1900.

True Havana.

5394–5457.

From Calcutta, India. A collection of seeds of Indian economic plants presented by Prof. D. Prain, Superintendent Royal Botanic Garden. Received August 30, 1900.

5394. ÆSCHYNOMUM CANNABINA.

5395. AMARANTHUS POLYGAMUS. Distributed. **Amaranth.**

5396. ANETHUM SATIVA. Distributed. **Fennel.**

5394–5457—Continued.

5397.	Arachis hypogæa.	Peanut.
5398.	Basella alba.	Malabar nightshade.
5399.	Benincasa cerifera.	Wax gourd.
5400.	Cajanus indicus. Distributed.	Dâl.
5401.	Canavalia gladiata.	Knife bean.
5402.	Canavalia virosa.	Knife bean.
5403.	Capsicum frutescens.	Bird pepper.
5404.	Cicer arietinum.	Garbanzo.
5405.	Citrullus vulgaris.	Watermelon.
5406.	Corchorus olitorius.	Jute.
5407.	Coriandrum sativum.	Coriander.
5408.	Cucumis sativus.	Cucumber.
5409.	Cucumis utilissimus.	
5410.	Cucurbita pepo.	Squash.
5411.	Cuminum cyminum.	Cumin.
5412.	Dolichos lablab. *Falcatum majus.*	Madagascar bean.
5413.	Dolichos lablab. *Falcatum minus.*	Madagascar bean.
5414.	Dolichos lablab. *Purpurascens.*	Madagascar bean.
5415.	Vigna catjang (red).	Cowpea.
5416.	Vigna catjang (white).	Cowpea.
5417.	Eleusine coracana.	Ragi millet.
5418.	Ervum hirsutum.	Lentil.
5419.	Ervum lens.	Lentil.
5420.	Fœniculum vulgare.	Fennel.
5421.	Hibiscus esculentus.	Okra.
5422.	Indigofera tinctoria.	Indigo.
5423.	Lagenaria vulgaris.	Gourd.
5424.	Lathyrus sativus.	Bitter vetch.
5425.	Linum usitatissimum.	Flax.
5426.	Luffa acutangula.	Dish-rag gourd.
5427.	Luffa pentandra.	Gourd.
5428.	Momordica charantia.	Gourd.
5429.	Momordica muricata.	Gourd.
5430.	Nigella sativa.	Fennel flower.
5431.	Panicum italicum.	Millet.
5432.	Panicum miliaceum.	Broom-corn millet.
5433.	Papaver somniferum.	Poppy.
5434.	Pennisetum spicatum.	Pearl millet.
5435.	Phaseolus aureus.	Bean.
5436.	Phaseolus max.	Bean.
5437.	Phaseolus mungo.	Green gram.

5394–5457—Continued.

5438. Phaseolus pilosus. **Bean.**
5439. Phaseolus roxburghii. **Bean.**
5440. Physalis peruviana. **Ground cherry.**
5441. Plantago ispaghula.
5442. Ptychotis ajowan.
5443. Raphanus sativus. **Radish.**
5444. Sesamum indicum. **Sesame.**
5445. Sinapis dichotoma.
5446. Solanum melongena. **Egg plant.**
5447. Sueda maritima.
5448. Trichosanthus anguina.
5449. Trigonella corniculata.
5450. Trigonella fœnum-græcum. **Fenugreek.**
5451. Triticum vulgare. Distributed. **Wheat.**
5452. Zea mays. **Corn.**
5453. Amaranthus polygamus.
5454. Crotalaria juncea. **Sunn-hemp.**
5455. Panicum colonum.
5456. Phaseolus aconitifolius.
5457. Carthamus tinctorius. Distributed.

5458. Secale cereale. **Rye.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Thousandfold.

5459. Secale cereale. **Rye.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Giant Winter.

5460. Triticum vulgare. **Wheat.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Diamond Grit.

5461. Triticum vulgare. **Wheat.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Canadian Pearl.

5462. Triticum vulgare. **Wheat.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Paramount.

5463. Triticum vulgare. **Wheat.**
From London, Ontario. Presented by Darch & Hunter, August 31, 1900.
Gold Coin.

5464. TRITICUM VULGARE. **Wheat.**

From Argentina. Received September 1, 1900.

Chubut. This variety comes from the valley of the Chubut River, in southern Argentina. It is a semihard, red-grained wheat of very good quality. It is probably the best wheat for bread flour in South America. It is best known as a winter wheat, but will probably not stand our hard winters north of the thirty-fifth parallel. It should be sown about March 1.

5465. TRITICUM DURUM. **Wheat.**

From Argentina. Received September 1, 1900.

Candeal. This wheat is rather commonly grown in Chile and Argentina. It has long, compact, bearded heads, and yellowish-white, hard grains. It will probably be resistant to drought and to orange-leaf rust. Adapted for growing in dry, hot districts, such as west Texas and the drier portions of Colorado, Kansas, and Oklahoma. South of the thirty-fifth parallel it should be grown as a winter wheat, sown October 15 to November 15. North of this line it will probably not stand the winter and should be sown February 15 to March 1.

5466. TRITICUM VULGARE. **Wheat.**

From Argentina. Received September 1, 1900.

Francés. This variety is a soft or semihard, reddish-grained wheat, originally introduced into Argentina from France. It is a bald variety of only fair milling quality and not at all hardy. It is adapted for trial in the Southern States. Should be sown in October. It is one of the two chief varieties of all Argentina.

5467. TRITICUM VULGARE. **Wheat.**

From Argentina. Received September 1, 1900.

Barletta. A bearded winter variety. Chaff brown to black, smooth; beards very strong and ordinarily divergent; grain soft, red to amber; head rather loose and flattish; straw partially full.

5468. TRAPA BICORNIS. **Horn chestnut.**

From China. Seed purchased in the Chinese market, San Francisco, Cal. Received September 1, 1900.

5469. CASSIA FISTULA.

From Honolulu, H. I. Presented by Prof. Wm. C. Stubbs. Received September 4, 1900.

This tree can be grown in all tropical countries.

5470. CITRUS LIMONUM. **Lemon.**

From Honolulu, H. I. Presented by Prof. Wm. C. Stubbs. Received September 4, 1900.

5471. AVENA SATIVA. **Oat.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 453), March 11, 1901.

Ligowo. "A pedigreed variety, selected by the Seed Breeding Institute of Svalof, which has been very well received in Sweden, Russia, Germany, and Belgium. It possesses an unusually full, white kernel, making it especially adapted for the manufacture of oatmeal. It is earlier and possesses a stronger straw than the varieties generally grown in Sweden. It is of remarkable uniformity and a heavy yielder." (*Fairchild.*) Distributed.

5472. HORDEUM DISTICHUM ERECTUM. **Barley.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 450), March 11, 1901.

Princess. "A pedigreed variety, originated on the Seed Breeding Society's grounds and grown in quantity by the General Swedish Limited Seed Company of Svalof. It was selected from trial plots of the variety 'Prentice' and is characterized by an especially strong straw and an excellent quality of grain. It is remarkably well suited for heavy clay soils of a wet character. It deserves a thorough trial in all regions where the soil is heavy or wet and there is danger of the grain falling." (*Fairchild.*)

5473. HORDEUM DISTICHUM NUTANS. **Barley.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 451), March 11, 1901.

Chevalier II. "A pedigreed variety, selected by Dr. Nillsson from 'Horsford Chevalier.'" (*Fairchild.*)

5474. HORDEUM DISTICHUM ERECTUM. **Barley.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 472), March 11, 1901.

Svanshals. "A very early ripening variety, pedigreed at the Seed Breeding Institute of Svalof. It is suited to cold, wet, and even swampy land. Not comparable with No. 5472 or No. 5473 as a brewers' barley. Worthy of trial in a similar climate in America." (*Fairchild.*)

5475. VICIA SATIVA TYPICA. **Sweet vetch.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 454), March 11, 1901.

Foradlade Sotvicker. "A pedigreed variety, bred by the Seed Breeding Society of Svalof, Sweden. The seeds of this vetch are much heavier than those of ordinary varieties and the yield of seed surer and larger. This variety has just come on the market and the supply is limited." (*Fairchild.*)

5476. VICIA SATIVA TYPICA. **Gray vetch.**

From Svalof, Sweden. Received through Messrs. Lathrop and Fairchild (No. 455), March 11, 1901.

Foradlade Gravicker. "A pedigreed variety selected by the Seed Breeding Society of Sweden and characterized by much heavier seeds and very much larger yield of seed than the ordinary variety." (*Fairchild.*)

5477. (Blank.)

5478. CASTILLOA ELASTICA. **Rubber.**

From Heneratgoda, Ceylon. Presented by J. P. William & Bros. Received September 6, 1900.

Cervantes. (See Nos. 5188 and 5377.) Distributed.

5479. HEVEA BRASILIENSIS. **Para rubber.**

From Heneratgoda, Ceylon. Presented by J. P. William & Bros. Received September 6, 1900. Distributed.

5480. LILIUM HARRISSII. **Easter lily.**

From Bermuda. Received September 5, 1900. Distributed.

5481. VACCINIUM VITIS IDÆA. **Cranberry.**

From Kiovikko, Finland. Received through Messrs. Lathrop and Fairchild (No. 438), September 10, 1900.

"A wild cranberry from the moors of North Finland. This species, so far as I can learn, has never been cultivated in Sweden and Finland. It is, however, of considerable commercial importance and many carloads of the fruit are shipped yearly to Germany. The berries are one-fourth as large as those of *V. macrocarpon*, but Europeans claim they are more aromatic." (*Fairchild.*) Distributed.

5482. RUBUS CHAMÆMORUS. **Raspberry.**

From Kiovikko, above Uleåborg, Finland. Received through Messrs. Lathrop and Fairchild (No. 440), September 10, 1900.

"An orange-fruited Arctic raspberry, the English name of which is unknown to me. In Finland the fruits of this species are dried and kept for months. They have a peculiar acid taste, highly appreciated. Never cultivated in Finland. A true moor plant, suitable only for Alaskan moors." (*Fairchild.*) Distributed.

5483. RUBUS ARCTICUS. **Arctic raspberry.**

From Uleåborg, Finland. Received through Messrs. Lathrop and Fairchild (No. 439), September 10, 1900.

"A wild arctic and subarctic plant which is very abundant on the moors. It is nowhere cultivated and may be very difficult to grow from seed. The only region where it might succeed is Alaska, where, presumably, the same species occurs. The fragrance of these Finnish berries is something delicious, and in Sweden and Finland exceptionally fine jam is made from them." (*Fairchild.*) Distributed.

5484. LUPINUS ALBUS. **White lupine.**

From France. Received September 14, 1900.

The white lupine is an excellent green-manure crop and winter soil cover. The seed should be sown by October 1, in time for the early rains and while the ground is yet warm. The crop should be plowed under when the lupines are in blossom." (*Hilgard.*)

5485. RUBUS ARCTICUS. **Arctic raspberry.**

From Abo, Finland. Received through Messrs. Lathrop and Fairchild (No. 424), September 12, 1900.

"A wild species growing in the swamps of northern Finland especially. The fruit is orange yellow, with a red blush, and has a refreshing flavor. This plant is not cultivated in Finland, but is highly prized for preserves. Should be sown in moss or very moist soil." (*Fairchild.*) (See No. 5483.) Distributed.

5486. TRITICUM VULGARE. **Wheat.**

From Ithaca, N. Y. Presented by Prof. I. P. Roberts, Director of the Cornell Experiment Station. Received September 12, 1900.

Dawson's Golden Chaff. "Under very unfavorable conditions and a winter so severe that there was almost an entire failure of wheat on the surrounding farms, this wheat yielded 41 bushels per acre." (*Roberts.*)

5487. ALLIUM CEPA. **Onion.**

From Woodhaven, N. Y. Presented by Mr. H. Beaulieu, seedsman and florist, September 6, 1900.

"A white onion, hardy in New York, which will stand the coldest weather without protection. Sow from August 15 to September 15. Comes about three weeks earlier than the sets and does not go to seed the first year. Similar in color and shape to the White Portugal, but much earlier." (*Beaulieu.*)

5488. CYPHOMANDRA BETACEA. **Tree tomato.**

From Ceylon. Received through Messrs. Lathrop and Fairchild, September 19, 1900.

"This species has been introduced into Ceylon very extensively from the West Indies and has proven a great success. It is used by many European families and is a very palatable fruit." (*Fairchild.*) (See Nos. 5112, 5115, 5116, 5191, 5219, and 5220.)

5489. CARICA PAPAYA? **Papaw.**

From Ceylon. Received through Messrs. Lathrop and Fairchild.

"A very interesting species which I was not able to determine, but which is cultivated quite extensively in the mountain regions of Ceylon, which are subject to occasional frosts. The plants are, therefore, hardier than the ordinary *Carica papaya* and should be widely distributed in Florida. The fruits of this species are much smaller than the ordinary *Carica*, but are very much relished by the natives and are often eaten by Europeans. They have a refreshing acid flavor quite different from that of the ordinary species. For papayin extraction this species may prove valuable." (*Fairchild.*) Distributed.

5490. LINUM USITATISSIMUM. **Flax.**

From Paris, France. Received through Messrs. Lathrop and Fairchild, September 19, 1900.

Specimen furnished by the Stockholm Economic Museum. Reported to be seed grown in Sweden, and therefore may prove hardier than varieties grown farther south." (*Fairchild.*)

5491. ROSA CANINA. **Wild rose.**

From Sweden. Received through Messrs. Lathrop and Fairchild, September 19, 1900. (See No. 880, Inventory No. 1.) Distributed.

5492. TRITICUM DURUM. **Wheat.**

From France. Received October 12, 1900.

Medeah. This wheat is from stock selected and grown by Vilmorin-Andrieux & Cie., of Paris. It is suitable for fall planting in the South or spring planting in the North. It is heavily bearded, with a smooth, brown chaff, small but rather strong, solid straw, and very hard, light-amber colored grain. It is one of the best-known varieties of the hard French wheats, and, although not especially valuable for bread making, is a heavy yielder, and is particularly adapted for macaroni manufacture. Distributed.

5493. TRITICUM VULGARE. **Wheat.**

From Collegepark, Md. Received September 21, 1900.

Fultz. A winter wheat grown at the Maryland Agricultural College.

5494. CUCUMIS.

From Tiger Mill, Tex. Received September 25, 1900. Presented by Mr. H. T. Fuchs.

Genuine Field Pomegranate. "Very fine eating, either raw or cooked." (*Fuchs.*)

5495. CITRULLUS VULGARIS. **Watermelon.**

From Tiger Mill, Tex. Received September 25, 1900. Presented by Mr. H. T. Fuchs.

Best of All. Distributed.

5496. TRITICUM VULGARE. **Wheat.**

From Budapest, Austria-Hungary. Received September 27, 1900.

Banat.

5497. TRITICUM VULGARE. **Wheat.**

From Budapest, Austria-Hungary. Received September 27, 1900.

Theiss.

5498. TRITICUM VULGARE. **Wheat.**

From Budapest, Austria-Hungary. Received September 27, 1900.

Bacska.

5499. TRITICUM VULGARE. **Wheat.**

From Budapest, Austria-Hungary. Received September 27, 1900.

Weissenburg.

5500. TRITICUM VULGARE. **Wheat.**

From Budapest, Austria-Hungary. Received September 27, 1900.

Pesterboden.

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BULLETINS OF THE BUREAU OF PLANT INDUSTRY.

The Bureau of Plant Industry, which was organized July 1, 1901, includes Vegetable Pathological and Physiological Investigations, Botanical Investigations and Experiments, Grass and Forage Plant Investigations, Pomological Investigations, and Gardens and Grounds, all of which were formerly independent Divisions, and also Seed and Plant Introduction, the Arlington Experimental Farm, Tea Investigations and Experiments, and the Congressional Seed Distribution. Beginning with the date of organization of the Bureau, the bulletins of Seed and Plant Introduction, which were formerly published in the series of the Division of Botany, the last number of which was 29, and also those of the other Divisions was discontinued, and all are now published as one series of the Bureau.

The bulletins published in the Bureau series are:

No. 1. The Relation of Lime and Magnesia to Plant Growth, 1901.
2. Spermatogenesis and Fecundation of Zamia, 1901.
3. Macaroni Wheats, 1901.
4. Range Improvement in Arizona, 1901.